STACK
SECTION
SHELF

WITHDRAWN

NORTHLAND COLLEGE
WILLIAMSBURG
KY.

# RECENT DEVELOPMENTS IN EUROPEAN THOUGHT

*ESSAYS ARRANGED AND EDITED*

BY

F. S. MARVIN

AUTHOR OF 'THE LIVING PAST', ETC.

'To hope till Hope creates
From its own wreck the thing it contemplates.'
*Prometheus Unbound.*

*Third Impression*

HUMPHREY MILFORD
OXFORD UNIVERSITY PRESS
LONDON EDINBURGH GLASGOW COPENHAGEN
NEW YORK TORONTO MELBOURNE CAPE TOWN
BOMBAY CALCUTTA MADRAS SHANGHAI PEKING
1921

1046

PRINTED IN ENGLAND
AT THE GARDEN CITY PRESS

# PREFACE

THIS volume, like its two predecessors, arises from a course of lectures delivered at a Summer School at Woodbrooke, near Birmingham, in August, 1919. The first, in 1915, dealt with 'The Unity of Western Civilization' generally, the second, in 1916, with 'Progress'. In this book an attempt has been made to trace the same ideas in the last period of European history, broadly speaking since 1870.

It was felt at the conclusion of the course that the point of view was so enlightening and offered so many opportunities of useful further study that it should, if possible, be resumed in future years. A large number of subjects were suggested—'The Relations of East and West,' 'The Duty of Advanced to Backward Peoples,' 'The Rôle of Science in Civilization,' &c.—all containing the same elements of 'progress in unity' which have inspired the previous volumes. It was thought that possibly for the next session 'World

Reconstructions Past and Present' might be most appropriate.

If any reader feels moved by interest or sympathy with the general idea to send suggestions, either as to possible places of meeting, or topics for treatment or any other kindred matter, they would be welcomed either by the Editor or by Edwin Gilbert, Woodbrooke, Selly Oak, Birmingham.

F. S. M.

BERKHAMSTED,
*December*, 1919.

# CONTENTS


PAGE

I. GENERAL SURVEY . . . . . 7
By F. S. MARVIN.

II. PHILOSOPHY . . . . . 25
By Professor A. E. TAYLOR, St. Andrews.

III. RELIGION . . . . . 65
By Dr. F. B. JEVONS, Hatfield Hall, Durham.

IV. POETRY . . . . . 91
By Professor C. H. HERFORD, Manchester.

V. HISTORY . . . . . 140
By G. P. GOOCH.

VI. POLITICAL THEORY . . . . . 164
By A. D. LINDSAY, Balliol College, Oxford.

VII. ECONOMIC DEVELOPMENT . . . 181
1. THE INDUSTRIAL SCENE, 1842 . . 181
2. MINING OPERATIONS . . . . 195
3. THE SPIRIT OF ASSOCIATION . . . 209
By C. R. FAY, Christ's College, Cambridge.

VIII. ATOMIC THEORIES . . . . 216
By Professor W. H. BRAGG, F.R.S.

IX. BIOLOGY SINCE DARWIN . . . 229
By Professor LEONARD DONCASTER, F.R.S.

X. ART . . . . . 247
By A. CLUTTON BROCK.

XI. A GENERATION OF MUSIC . . . 262
By Dr. ERNEST WALKER, Balliol College, Oxford.

XII. THE MODERN RENASCENCE . . 293
By F. MELIAN STAWELL.

# I

# GENERAL SURVEY

F. S. Marvin

We are trying in this book to give some impression of the principal changes and developments of Western thought in what might roughly be called 'the last generation', though this limit of time has been, as it must be, treated liberally. From the political point of view the two most impressive milestones, events which will always mark for the consciousness of the West the beginning and the end of a period, are no doubt the war of 1870 and the Great War which has just ended. From 1870 to 1914 would therefore be the most obvious delimitation of our study; and it is a striking illustration of human paradox that a great stage in the growth of unity should be marked by two international tragedies and crowned by the most terrible of all.

Nearly coincident with the political divisions there are important landmarks in the history of thought. During the 'sixties, while the power of Prussia was rising to its culmination in the Franco-Prussian War, the Darwinian theory of development was gaining command in biology. To many thinkers there has appeared a clear connexion between that biological doctrine and the 'imperialism', Teutonic and other, which was so marked a feature of the time. In any case 'post-Darwinian' might well describe the scientific thought of the age we have in view.

Industrially the epoch is as clearly defined as it is in politics and science. For in 1871, the year of the Treaty

of Frankfort, an act was passed after a long working-class agitation, assisted by certain eminent members of the middle class, legalizing strikes and Trade Unions. And now at the end of the war, all over the world, society is faced by the problem of reconciling the full rights, and in some cases the extreme demands, of 'labour', with democratic government and the prosperity and social union of the whole community. This is the situation discussed in our seventh and eighth chapters.

In philosophy and literature a similar dividing line appears. In the 'sixties Herbert Spencer was publishing the capital works of his system. The *Principles of Psychology* was published in 1872. This 'Synthetic Philosophy' has proved up to the present the last attempt of its kind, and with the vast increase of knowledge since Spencer's day it might well prove the last of all such syntheses carried out by a single mind. Specialism and criticism have gained the upper hand, and the fresh turn to harmony, which we shall notice later on, is rather a harmony of spirit than an encyclopaedic unity such as the great masters of system from Descartes to Comte and Spencer had attempted before.

In literature also the dates agree. Dickens, most typical of all early Victorians, died in 1870. George Eliot's last great novel, *Daniel Deronda*, was published in 1876. Victor Hugo's greatest poem, *La Légende des Siècles*, the imaginative synthesis of all the ages, appeared in the 'seventies. There have been many writers since, with Tolstoi perhaps at their head, in whom the fire of moral enthusiasm has burnt as keenly, nor have the borders of human sympathy been narrowed. Yet one cannot fail to note a less pervading and ready confidence in human nature, a less fervent belief that the good must prevail if good men will only follow their better leading.

Here then is our period, marked in public affairs by a progress from one conflict, desperate and tragic, between two of the leading nations of the West, to another and still more terrible which swept the whole world into the maelstrom; and marked in thought by a certain dispersion and depression of mind, a falling in the barometer of temperament and imagination, but also by a grappling with realities at closer quarters. No wonder that some have seen here a 'tragedy of hope' and the 'bankruptcy of science'.

But it must be noted at once that these obvious landmarks, though striking, are in themselves superficial. They require explanation rather than give it, and in some cases an explanation, much less tragic than the symptom, is suggested by the symptom itself. We may at least fairly treat them at starting simply as beacon-hills to mark out the country we are traversing. We have to go deeper to find out the nature of the soil, and travel to the end to study the vista beyond.

In making this fuller analysis of man's recent achievement, especially in the West, the first, and perhaps ultimately the weightiest, element we have to note is the continued and unexampled growth of science. Was there ever a more fertile period than the generation which succeeded Darwin's achievement in biology and Bunsen's and Kirchhoff's with the spectroscope? Both have created revolutions, one in our view of living things, the other in our view of matter. In physics the whole realm of radio-activity has come into our ken within these years, and during the same time chemistry, both organic and inorganic, has been equally enlarged. All branches of science in fact show a similar expansion, and a new school of mathematicians claim that they have recast the foundations of the fundamental science and assimilated it to the simplest laws of all thinking. Some

discussion of this will be found in the chapter on philosophy.

It may serve as tonic—an antidote to that depression of spirits of which we have spoken—to consider that such an output of mental energy, rewarded by such a harvest of truth, is without precedent in man's evolution. No single generation before ever learnt so much not only of the world around it but also of the doings of previous generations. For since 1870 we have been living in an age as much distinguished for historical research as for natural science. If mankind is now to go down in a wrack of war, starvation, bankruptcy, and ruin, the sunset sky at least is glorious.

And there is tonic in another thought which rises from the very nature of this recent blossoming of knowledge. It marks the growing co-operative activity of mankind. The fact that science and research of every kind have advanced so rapidly is not only, or even primarily, a proof of the continued vigour of the human intellect, but of the stability of society, the coherence of social classes and nations, the readiness of the bulk of men to allow their more immediately productive work to be used for the support of those whose labours are in a more remote and ideal sphere. Science did not begin until the ancient priesthoods were enabled to pursue disinterested inquiries without the need of earning their daily bread. Civilization, we may be assured, is not threatened in its most vital part so long as the general will permits the application of the general resources to the promotion of learning and research without a claim for immediate marketable results. Our last generation has not only permitted but has encouraged this in all Western countries, and in other countries, such as China and Japan, influenced by the West. The money thus spent is vastly greater than in any equal period before,

and the United States, the land of the fullest democratic claims, is also the land of the amplest generosity for scientific and educational purposes.

The growth of knowledge is a symptom not only of the collective capacity of living man but also of the continuity of the present age with those which had laid the earlier foundations. One school of vigorous action, and still more vigorous talk, advises our generation to be done with the past and make a fresh start on more ideal lines. This is not the voice of science, which, just in proportion to its growth, has shown more and more care for its origins and its past: and this is true at every stage in the history of thought. The Greeks, fighting for freedom and establishing in the city-state a new form of political organization for the world, were yet in their scientific evolution true and grateful successors of the priests who first compiled the observations necessary for the scientific study of the heavens and founded the art of medicine. The men of the Renascence, who were burnt and imprisoned for doubting the verbal inspiration of Aristotle and the Bible, were in fact going back to an earlier impulse than that of the scholastic philosophy. The mathematics of Pappus and the mechanics of Archimedes had to be carried further before the new sciences of which Aristotle had given the first sketch could be securely founded. The pioneers of the sixteenth and seventeenth centuries built therefore on the past, although accused of impiety and revolution; and it must be so with any intellectual construction which is to hold its own and form the future. So far from there being any opposition in nature between history and science, the two are but different aspects of one continuous enlargement of the human spirit, which sees and lives more fully at each great moment of its progress, and, so far as it is alive, is always informed by the real

achievements of the past. We illustrate this advance in the marvellous record of our fifth chapter, and its spirit is summed up in the great saying of Benedetto Croce that ' all history is contemporary history '.

But the reader may here begin not unnaturally to feel some impatience with the argument, and to think that he is being carried into a region of ideal imaginings quite out of touch with the realities of blood and hatred and starvation with which we have been actually surrounded at the end of our period. It is well to be thus sharply reminded of the contrariety of facts, when we are sailing smoothly along on the current of any theory, whether of education or politics, religion or art. To get right with our objector, to set our sail so that the rocks in the stream may not completely wreck us, we will go back to the point where we were insisting on the obvious truth that the collective resources and capacity of mankind have of late enormously increased.

The material fruits of science are among our most familiar wonders—the motor-car, the aeroplane, wireless telegraphy. But it is not sufficiently realized how all these things and the like are dependent upon the co-operation of a multitude of minds, the collective rather than the individual capacity of man. Men had dreamt for ages of flying, but it was not until the invention of the internal combustion engine that bird-like wings and the mechanical skill of man could be brought together and made effective. It is Humanity that flies, and not the individual man alone. The German Daimler, the French Levassor, are the two names which stand out most prominently in this later development of engineering as our own Watt and Stephenson stand in the history of the steam-engine. Wireless telegraphy offers a similar story. Faraday, Maxwell, Hertz, Lodge, Marconi ; the names are international. In 1913, before ever the League

of Nations had been planned, Lord Bryce was telling an International Congress in London that 'the world is becoming one in an altogether new sense. . . . More than four centuries ago the discovery of America marked the first step in the process by which the European races have gained dominion over nearly the whole earth. As the earth has been narrowed through the new forces science has placed at our disposal, the movements of politics, of economics, and of thought, in each of its regions, become more closely interwoven. Whatever happens in any part of the globe has now a significance for every other part. World History is tending to become one History.'

The war, tragically as it has shaken this growing oneness of mankind, has not destroyed it. In some ways it has even stimulated growth. Against a background of blood and fire the League of Nations has been forced into actual being, and the long isolation alike of the ancient East and the youthful West has been broken down at last. Within the State, again, even allowing for all setbacks, the efforts at social solidarity have on the whole been strengthened, not weakened. This war has been an accelerator of, not, as the Napoleonic, a brake upon, reform. Many reforms, especially in England, which had been long discussed and partly attempted before the war, were carried out with dispatch at its close. This was the case with education, with the franchise and with measures affecting the health, the housing, and the industrial conditions of the people. And there is now a greater and stronger demand among us for a further advance, above all for making every citizen not merely or even primarily a voting unit, but a consciously active, consciously co-operative, member of the community.

Comte, who died in 1857 just before our period, was perhaps the clearest voice in Europe to herald both

movements: the advance to international unity, and social reform within the State. It was he who, under the title of *Western Republic*, proclaimed the existence of a real unity of nations, whose business it was to strengthen themselves as a moral force, to act as trustees for the weaker people and lead the world. It was he who, in the phrase 'incorporation of the proletariate', summed up all those social reforms in which we are immersed, which aim at making every citizen a full member of his nation. Like all ideals it was far easier to conceive and to respect than to foresee or to secure the necessary means to put it into effect. Perhaps the perfect symmetry of the plan, the over-sanguine hopes of the man who framed it, have even proved some hindrance to its rapid spread. It has seemed, like Dante's polity in the *De Monarchia*, to take its place rather among the utopias than the practical schemes of reform, and when men saw the infinite complexity of the problems and met the living lions in the path, they suffered the comparative depression which we have noticed as a feature of the age.

Here indeed it would appear that we have reached one of the most serious cross-currents in recent European thought. In science, in philosophy, in politics, and in social economics, though we see the goal at least in outline, we are in some danger of being overwhelmed by the difficulties of the pursuit. Our vision is somewhat clouded and our steps hampered by the entangling details of the country between. It is substantially the same problem which faces us both in the philosophical and the practical sphere, and the analogy between the two is instructive. Spencer's synthesis, which we instanced as the last encyclopaedic attempt to present all knowledge—at least all scientific knowledge—in one system, has been riddled fore and aft by hostile shot, though in

the end more of it may be found to have survived than is seen at present above water. The philosopher who in our generation has acquired the European vogue most comparable to that of Spencer is Bergson. Now Bergson has dealt some of the shrewdest blows at Spencer's system, but he does not set out to construct a rival system of his own. He is most careful to say that he is not doing this, that any such work must be done by later workers, that he is only making suggestions for a new point of view. It is interesting to note in general terms what that point of view is, as we shall have occasion later on to revert to it. It rests on a new interpretation of the nature and growth of conscious life. He is in short a *semeur d'idées-force* rather than an encyclopaedist or a system-maker. The difference is characteristic of the age and might be traced in the other contemporary schools, the pragmatists, the new realists, and the rest. The new Descartes is looked for but not announced. Perhaps when he arrives he will prove to be a whole army and not a single man. But if an army, it will need a better co-ordination, a more clearly defined common spirit, than is at present apparent in the philosophic hosts.

A similar perplexity in the practical sphere has a similar cause but a graver urgency. The multiplicity and contrariety of the facts are upon us as we face in practice the ideals which we have accepted from the earlier thinkers, from the century of hope. In science and philosophy we feel that the cause of unity may with some safety be left to look after itself. If the new Descartes does not appear in person, we may have confidence that plenty of inferior substitutes will be found, who, if they work together, will keep alive the great task of unifying thought. For in this region the nature of things assists our efforts and will sooner or later get the work done. The stars in their courses are fighting

for us and for unity. But in the world of wills the task is tenfold more difficult and the dangers imminent. The poor and labouring millions, the oppressed and dissatisfied nations, are forcing the door, and though there is fair agreement in theory as to how they should live and work together in peace, yet the realization is by no means automatic, and the difficulties thicken as we come nearer to them.

But even here, perhaps most of all here, it is the first word of wisdom to take stock of the favourable symptoms, to see clearly the forces on which we can rely in our forward march. And they are not far to seek in all classes and in every Western land. Read any account of an English community in the early nineteenth century, say George Eliot's 'Milby' in the *Scenes of Clerical Life*. How far more humane, more enlightened, and happier is the state of the succeeding community, the Nuneaton or Coventry of the present day! No question but the novelist would have welcomed as a convincing proof of her 'meliorist' doctrine the progress made in her own homeland in the century since her birth. We know by personal experience the general kindliness and cheerfulness of our fellow citizens, their tolerance, their readiness to hope, their prevalent orderliness and self-restraint. We are thinking perhaps of a certain tendency to slackness, a dangerous falling-off in the output of work. If that be so, we need only look at the activities of any playground, or of a class-room in a well-ordered school, to be sure of the future. The natural man, at least in our temperate climates, and as exhibited in the behaviour of his natural progenitor, the child, is all for vigour and experiment. It is we, the adult community, the trustees of the child, who are to blame if his maturity fails of the eager questioning and the untiring labours of his unspoilt youth.

But we are dealing in this volume rather with changes of thought than with the actual life of the times. Theories affecting the organization of work, the distribution of the product, and the government of society have had much to do with our present difficulties. They have arisen from the conditions of the industrial revolution and the doctrines of the political revolution which began about the same time, and they have reacted ever since on the work and wages, the life and government of the mass of Western men. They are discussed in our eighth chapter. It may be said broadly that in this sphere, as in philosophy, the old and *simpliste* doctrines have been criticized almost to the point of extinction, but that no new all-embracing practical synthesis has taken their place. The Marxian theory that social evolution has been due mainly to economic causes, that these have produced inevitably the present—or recent—capitalist system, which inevitably must be turned upside down in the interests of manual labour—this is no longer dominant in any Western community, though it is fighting a desperate battle in Eastern Europe. But it is equally true that the capitalist system, presented in an ideal and moralized form in the utopias of St. Simon and Comte, is not generally accepted now as an ideal for industry. The spirit which Comte desired and believed would animate the moralized employer, acting as the providence of his workpeople, we look to find rather in a reconstituted and moralized State. We all share this hope in our degree, *The Times* as well as the *Daily News*, and we do not expect the new spirit to operate simply through the free-will and private capacity and initiative of individuals. The joint stock company has settled that.

What we are waiting and hoping for is the time when, under the aegis of a benevolent State, capital and labour may live together in many mansions and, like the monks

of old, follow many rules of life. In this region our ideal of unity is more diversified than in the realm of thought, and there is no demand for a Descartes.

And here it is interesting to note that one of the most telling books on social reconstruction published since the war is by an international writer. This is Dr. Walther Rathenau, a German of Jewish descent, whose ideas have just been popularized by a Frenchman, M. Gaston Raphael.[1] He fits in well with our general argument by virtue of his double attitude, holding, on the one hand, that under the general supervision of the State, industry should be organized in various self-governing groups, 'Social Guilds' or 'professional syndicates' in which both employers and workmen would be included with representatives of the Government; while, on the other hand, he is emphatic that progress must proceed from a changed and widening mentality, and aim in turn at increasing the depth and capacity of the individual soul.

Our book has no special chapter on the League of Nations itself. The idea pervades the whole, and the subject was treated in detail in the first volume of this series (*The Unity of Western Civilization*, 1915). The history behind the League offers a striking analogy to the other struggles for unity of which we have spoken. There is the same advance from the idea of a unity dictated and controlled by one mind to a unity of spirit arising from the free co-operation of many diverse elements all aiming at the same general good. Down even to yesterday it seemed to many minds a necessary condition that one man, gathering in his hands the resources of one great State, should from that centre dominate the world. And in the dawn of human history it was no doubt often true, the only way in which the world could

[1] *Walther Rathenau. Ses Idées et ses Projets d'Organisation Économique.* By Gaston Raphael (Paris: Payot, 4 f. 50 c.).

then advance. This was true for Alexander, the prototype of all the Roman conquerors, and true, conspicuously, for the Roman empire at its best. But, after the break-up of the empire, unity of this type became a delusive mirage, misleading all who, like the Holy Roman emperors, sought to enjoy it again. By the time of Napoleon it had become an anachronism of the most dangerous and reactionary kind. The world was then too vast, the freedom of men and nations too various and deeply rooted. Meanwhile a real unity, stronger than before, had been forming beneath the surface and needed fresh institutions to body it forth. This movement for unity has been, as we have seen, precipitated by the war into visible and decisive action. It had been simmering for three hundred years in ' Great Designs ', ' Projects of Peace ', Treaties of Arbitration, and Hague Conventions.

Among much that is doubtful in the future of the League, one thing stands out as a capital certainty. Without losing the very spirit of its being it can never become a satellite system, revolving round one dominant Power or even a dominant clique. It was formed to contradict and destroy an oppressive imperialism: it can only thrive by the free co-operation of the partners, finding their proper end in a prosperity shared by all.

Such is a short summary of some of the leading topics treated here, those perhaps in which public interest has been most keenly aroused. But nothing has been said in this introduction of Art or Music, and of Religion only a little by implication. It may be well in conclusion to attempt a still more summary impression of the main drift of the period on the spiritual side. We may in such a wider view see some common tendency in all these activities, some inspiration of religion, some link with art, some impulse to live strongly and to hope.

The present writer would find this leading thread in

the increasing stress laid by recent European thought on the spiritual, or psychological, side of every problem, in the growing desire to understand the character of man's own nature and to develop all the powers of his soul.

One of the latest authorities [1] on anthropology has told us that ' to develop soul is progress ', and he has followed the clue through the meagre relics of Palaeolithic and Neolithic man. So does the last science of the nineteenth century throw light on the dim recesses of the past. For unquestionably psychology is the characteristic science added to the hierarchy in our period ; it has crowned biology and is exercising a profound influence on philosophy, literature, and even politics. If Aristotle was its founder, if it was Descartes who first showed its profound connexion with philosophy, it is to workers in our own day that we must look for those methods of accurate observation, comparison, and the study of causes without which it could not advance farther. And modern psychology has advanced far enough to see that we must include in its purview the ' soul ' of a minnow as well as of a man. Descartes had stopped too short, for to him animal life, as distinct from human, showed only the movements of automata. But now, just as the biologist conceives man as part of one infinite order of living things, so the psychologist believes that the facts of his consciousness, the crown of life, must find their place somewhere related to the simplest movements of the amoeba. Hence the whole of animate evolution, and not only that part of which Dr. Marett spoke, may be thought of as the growth of soul.

But, the objector will inquire, does this imply the enlargement of every individual or even of the average

[1] R. R. Marett in *Progress and History* (Oxford University Press).

or the typical personality? And if not, what becomes of a 'growth of the soul'?

To this we must admit the impossibility of any complete, or even approximate, answer with our present knowledge. We can only note one or two points of certainty or of confident belief. The first, that there have been individual men, an Aristotle or a Shakespeare, in the past, with whom later ages never have, and perhaps never may, compare. The second, that there are good grounds for thinking that the average man has improved in goodness and in knowledge since we first knew him dimly in the dawn of history. But more important and more certain is the fact that the collective soul of man has grown, and all the extensions of knowledge and of power of which our volume speaks bear witness to it. They are essentially social in origin and outlook, and rest on a foundation of common thought immeasurably wider than any in the more distant past.

The man of science, the statesman, even the poet, now speaks for a multitude, and out of a multitudinous consciousness, which had not gathered to support, to inspire, or to weigh down, an Aristotle, a Pericles, a Cromwell. This is a dominating fact from which it is well to take our start. Assuredly the soul of mankind has been collectively enlarged and enriched. How far the individual can share in this enlargement is still one of the problems of the future. The West has committed itself to a general policy of education which aims at making every citizen a full partaker in the advance of the race. But it cannot be said that this policy has yet been really tried. It is the acknowledged ideal to which in all Western countries partial steps have been taken, and the democracy, through their most enlightened leaders, will continue to press for its fulfilment. As this approaches, the individual may become more and

more in his degree the microcosm which philosophers have proclaimed him, and the enlargement of the soul, which we know to be a fact for humanity, will become a fact for every man. Need we doubt that with the general raising in the level new eminences will appear? Do not great mountains sometimes rise from the sea and sometimes from the high plateau? We are now in the very midst of a struggle for settlement and incorporation, which, as it is accomplished, should prepare the way for new excellences of every kind. What may not be hoped of men if once they learn to live with their fellows? And they can only so learn by studying them. This is felt by all contemporary writers from Bergson in philosophy to Graham Wallas in politics. Poets and novelists, above all, have turned more and more to problems of the inner life.

The novelists who ushered in our age are significant of this, and none more so than George Eliot, whose work, though somewhat out of fashion for the moment, is yet marked by the transition from Victorian complacency to modern unrest and modern hopes. Full of love and appreciation for the old order in England—the contentment and humours of the country-side, the difference of classes, the respect for religion—she was carried by the evolutionary philosophy of her time into thoughts of an eternal and world-wide order, the growth of humanity, the kinship of man with the universe, the social nature of duty. Her contribution was essentially psychological; she enlarged our knowledge of the soul. She showed us, not certainly more living types than Scott or Dickens, but more play of motives, more varied interests in life, more mental crises. The soul, above all the woman's soul, had widened its horizon between Flora Macdonald and Dorothea Brooke.

Every reader will think of famous novelists who have

followed the same broadening path, and their work is often really great as well as famous. The history of thought has in fact throughout the last century been a commentary on those words of Keats to which many of us have turned of late for comfort and inspiration: 'The world is not a vale of tears, but a vale of soul-making.' Tears there are in abundance, as the tears of children. But sorrow is not the leading note of children, nor should it be of humanity in growth. Soul-making—the practice and the theory—has become more and more clearly and consciously the object of human thought and endeavour. We need the greater mind to see the links in the overwhelming mass of science, in the mazes of human action and history. We need it still more to grasp and to preserve the unity of our social life. Most of all for the healing of the world is the greater soul needed, with a world-consciousness, some knowledge, some sympathy, some hope for all mankind. Without this, a league of nations would be dead before its birth.

The recent development of psychology, social as well as individual, its pursuit on scientific lines, and its alliance with biology, suggest one thought which applies generally to an age of science and may be found to throw some illumination even on the future. Which of all types of modern men is the most habitually hopeful, the man of letters, the politician, the business man, or the man of science? There can be no question of the answer. The typical man of science is sure of the greatness and solidity of the work he shares, and confident that the future will extend and make still more beneficial its results. His forward glance is more assured because the backward reveals a course of growing strength and continuous ascent. The physicist foresees unmeasured sources of energy, still untapped. He warns us of our dangers, but has no doubt that, with due foresight, we may overcome

them, and make the reign of man upon the planet wider and firmer than before. The doctor knows no disease which may not in time yield to scientific treatment. The agricultural expert foresees, and can produce, new types of grain and fruit which will surpass the best yet known. And the trainer of youth, the man to whom the new science of psychology stands most in stead, is the most hopeful of them all. Dealing with human nature in its growth he puts no limits to its powers of goodness and activity. He deplores the want of wise methods in the past, and if he errs at all it is in an excess of optimism, in believing that with new methods we may make a new man.

On this enlargement of the soul, enlightened by science, we build the future. It is the crowning vision of the modern world, first sketched by Descartes, filled out and strengthened by the life and thought of three hundred years. In the interval we have lived much and learnt much, both of our own nature and of the world in which we live. In our own age a powerful stimulus has been given by a transformed biology and a new science which shows the soul itself in growth from an immemorial past, moulding the future by its own action, surmounting, while assimilating, the mechanism which surrounds it. But for this building two things are needed. One, that our souls, as builders, shall act as one with all our fellows and strive for unity as well as power. The other, that in the building the laws of growth shall be followed, which science has already revealed in part and will reveal more fully. For the spirit of science is the spirit of hope.

# II

# PHILOSOPHY

Professor A. E. Taylor

* * * * * *

Between forty and fifty years ago a great European man of science, Emil du Bois-Reymond, delivered before an audience of the leading scientific men of Germany a famous discourse on *The Limits of our Knowledge of Nature*, which he followed up some years later with a second discourse on the *Seven Riddles of the Universe*. His object was to convince the materialists of the 'seventies that there were at least seven such unsound places in *their* story of everything. Some of the 'riddles', he admitted, might prove to be soluble as science advances, but the most important of them will always remain unanswered. Our position as regards them will always be *ignoramus et ignorabimus*—we do not know the solutions and we never shall know them. I do not ask now whether du Bois-Reymond was right in his judgement or not. If he was right, that means, of course, that the one tale of everything will never be told by human lips to human ears. There will no more ever be a finally true Philosophy than there will ever be a finally perfect poem or picture or symphony. But there is no reason why we should not, at any rate, try to make our story as nearly perfect as we can, to reduce the number of the places where we have to break off with 'that is another story', and perhaps even to hazard a 'wide solution' in matters where absolute certainty is beyond our reach. This is the work of human Philosophy as I conceive it, and

every man who is disinterestedly trying, without one eye on wealth or fame or domination over the minds of others, to make any contribution, however humble, to the telling of this one story or the removal of loose threads from it, is inspired by the true spirit of Philosophy. Whoever is doing anything else, no matter under what name or with what profit or renown to himself, is no true philosopher.

This point of view implies, it will be seen, no sharp dividing line between Philosophy and Science. The avoidance of this commonly made distinction may offend two different sets of students—students of metaphysics who wish to exalt their own pursuit at the expense of the 'special' sciences, and students of natural science who are accustomed to pride themselves on the contrast between the finality and definiteness of their own results and the vagueness and dubiousness of the conclusion of the metaphysicians. But I must avow my own conviction that the only distinction we can make is one of convenience, and it may help to make my peace with both parties if I explain where I take this distinction of convenience to come in. If we are ever to construct an approximation to the one story of everything, clearly one result will consist of a relatively few first principles and a great mass of conclusions which can be inferred from them. And clearly again, since men differ so widely in their mental aptitudes, some men will be most successful in the detection of the principles which underlie all our knowledge, and others most successful in the accumulation of facts and the detailed working out of the application of the principles to the facts. For convenience' sake it will be well that some of us shall be engaged on the discovery of principles which are so very ultimate that most men take them for granted without reflecting on them at all, and others on the work of detail. Further,

it will be convenient that, within this second group, various students shall give their attention to more special masses of detail, according to their several tastes and aptitudes, some to the behaviour of moving particles, some to the behaviour of living organisms, some again to the structure and institutions of human societies, and so on. For convenience we may agree to call preoccupation with the great ultimate principles Philosophy and preoccupation with the application of the principles to masses of special facts Science. If we make the distinction in this way, we shall be following pretty closely the lines of historical development along which 'special' sciences have gradually been constituted. When we go back far enough in the history of human thought, we find that originally, among the great Greeks who have taught the world to think, there was no distinction at all between Science and Philosophy. Men like Plato and Aristotle were busied at once with the discovery of the first principles on which all our knowledge depends and with the construction of a satisfactory theory of the planetary motions or of the facts of growth and reproduction. As the study of special questions was pursued further, it became advisable to hand over the treatment of first one and then another group of closely interconnected questions to students who would pursue them independently of research into ultimate presuppositions. This is how Geometry, Astronomy, Biology came, in ancient times, to be successively detached from general Philosophy. The separation of Psychology—the detailed study of the processes of mental life—from Philosophy hardly goes back beyond the days of our fathers, and the separation of such studies as 'sociology' from general Philosophy may be said to belong quite definitely to our own time. If our children have leisure for study at all, no doubt they will see the process carried much further. But it is

important to bear in mind that neither Philosophy in the narrower sense nor Science in the narrower sense will be fruitfully prosecuted unless the men who are working at each understand that their own labours are only part of a single undivided work. Without a genuine grasp of some department of detailed facts no man is likely to achieve much in the search for principles, for it is by analysis of facts that principles are to be found, and without real insight into broad general principles the worker in detail is likely to achieve nothing but confusion. The antagonism between 'philosophers' and 'men of science' so characteristic of the last half of the nineteenth century has been productive of nothing but evil. It has given us 'philosophers' whose knowledge about the facts with which serious thinking has to deal has been hopelessly inaccurate; it has also given us 'men of science' who have been 'ageometretes' and have, by consequence, when forced to offer some account of first principles, taken refuge in the wildest and weirdest improvisation. For really fruitful work we need the union in one person of the 'man of science' and the 'philosopher', or at least the most intimate co-operation between the two. Our theories of first principles require to be constantly revised, purified, and quickened by contact with knowledge of detailed fact; and our representations of fact call for constant restatement in terms of a system of more and more thoroughly thought-out postulates or first principles. This is perhaps why the department of human knowledge in which the last half-century has seen the most remarkable advances is just that in which unremitting scrutiny of principles has gone most closely hand-in-hand with the mastery of fresh masses of detail, pure mathematics, and again why the present state of what is loosely called 'evolutionary' science is so unsatisfactory to any one who has a high ideal

of what a science ought to be. It exhibits at once an enormous mass of detailed information and an apparently hopeless vagueness about the meaning of the 'laws' by which all this detail is to be co-ordinated, the reasons for thinking these laws true, and the precise range of their significance. The work of men like Cantor, Dedekind, Frege, Whitehead, Russell, is providing us with an almost unexceptional theory of the first principles required for pure mathematics. We are already in a position to say with almost complete freedom from uncertainty what undefined simple notions and undemonstrated postulates we have to employ in the science and to express these ultimates without ambiguity. 'Evolutionary science,' rich as is its information about the details of the processes going on in the organic world, seems still to await its Frege or Russell. It talks, for example, much of 'hereditary' and non-hereditary peculiarities, and some of us can remember a time when our friends among the biologists seemed almost ready to put each other to the sword for differences of opinion about the inheritability of certain characteristics; but no one seems to trouble himself much with the question a philosopher would think most important of all—precisely what is meant by the metaphor of 'inheritance' when it is applied to the facts of biology. (Indeed, it is still quite fashionable to talk not merely as if a 'character' were, like a house or an orchard, a *thing* which can be transferred bodily from the possession of a parent to the possession of the offspring, but even as though an 'heir' could 'inherit' himself.)

This last remark leads me to a further consideration. Science and Philosophy are alike created by the simple determination to be *thorough* in our thinking about the problems which all things and events present to us, to use no terms whose meaning is ambiguous, to assert no

propositions as true until we are satisfied that they are either directly apprehended as true, or strictly deducible from other propositions which are thus apprehended. But now that the area of facts open to our exploration has become far too vast for a modern Francis Bacon to 'take all knowledge for his province', and convenience has led to the distinction between the philosopher and the man of science, a *practical* distinction between the two makes its appearance. It is *convenient* that our knowledge of detail should be steadily extended by considering the consequences which follow from a given set of postulates without waiting for the solution of the more strictly philosophical questions whether our postulates have been reduced to the simplest and most unambiguous expression, whether the list might not be curtailed by showing that some of its members which have been accepted on their own merits can be deduced from the rest, or again enlarged by the express addition of principles which we have all along been using without any actual formulation of them. The point may be illustrated by considering the set of 'postulates' explicitly made in the geometry of Euclid. We cannot be said to have made geometry thoroughly scientific until we know whether the traditional list of postulates is complete, whether some of the traditional postulates might not be capable of demonstration, and whether geometry as a science would be destroyed by the denial of one or more of the postulates. But it would be very undesirable to suspend examination of the consequences which follow from the Euclidean postulates until we have answered all these questions. Even in pure mathematics one has, in the first instance, to proceed tentatively, to venture on the work of drawing inferences from what seem to be plausible postulates before one can pass a verdict on the merits of the postulates themselves. The consequence of this

tentative character of our inquiries is that, so far as there is a difference between Philosophy and Science at all, it is a difference in *thoroughness*. The more philosophic a man's mind is, the less ready will he be to let an assertion pass without examination as obviously true. Thus Euclid makes a famous assumption—the 'parallel-postulate'—which amounts to the assertion that if three of the angles of a rectilinear quadrilateral are right angles, the fourth will be a right angle. The mathematicians of the eighteenth and early nineteenth centuries, again, generally assumed that if a function is continuous it can always be differentiated. A comparatively unphilosophical mind may let such plausible assertions pass unexamined, but a more philosophical mind will say to itself, when it comes across them, 'You great duffer, aren't you going to ask *Why*?' Suppose that, by way of experiment, I assume that the fourth angle of my quadrilateral will be acute, or again obtuse, will the body of conclusions I can now deduce from my set of postulates be free from contradictions or not? If I really give my mind to the task, cannot I define a continuous function which is *not* differentiable? The raising of the first question led in fact to the discovery of what is called 'non-Euclidean' geometry, the raising of the second has banished from the text-books of the Calculus the masses of bad reasoning which long made that branch of mathematics a scandal to logic and led distinguished philosophers—Kant among them—to suspect that there are hopeless contradictions in the very foundations of mathematical science.

Now, the effect of such careful scrutiny of first principles is not, of course, to upset any conclusions which have been correctly drawn from a set of premisses. All that happens is that the conclusion is no longer asserted by itself as a truth; what is asserted is that the conclusion

is true *if* the premisses are true. Thus we no longer assert the 'theorem of Pythagoras' as a categorical proposition; what we assert is that the theorem follows as a consequence from the assertion of some half-dozen ultimate postulates which will be found on analysis to be the premisses of Euclid's proof of his forty-seventh proposition.

To come back to the point I wish to illustrate. The peculiarity of the philosopher is simply that he still goes on to 'wonder' and ask *Why* when other persons are ready to leave off. He is less contented than other men to take things for granted. Of course, he knows that, in the end, you cannot get away from the necessity of taking something for granted, but he is anxious to take for granted as few things as possible, and when he has to take something for granted, he is exceptionally anxious to know exactly what that something is. De Morgan tells a story of a very pertinacious controversialist who, being asked whether he would not at least admit that 'the whole is greater than the part', retorted, 'Not I, until I see what use you mean to make of the admission.' I am not sure whether De Morgan quotes this as an ensample for our following or as a warning for our avoidance, but to my own mind it is an excellent specimen of the philosophic temper. Until you know what use is going to be made of your admission, you do not really know what it is you have admitted. It is this superior thoroughness of Philosophy which Plato has in mind when he says of his supreme science 'Dialectic' that its business is to examine and even to 'destroy' (ἀναιρεῖν) the assumptions of all the other sciences. It does not let propositions which they have been content to take for granted pass without challenge, and it may actually 'destroy' them by showing that there is no justification for asserting them. Thus Euclid's assumption about parallels ceased to be included among the indispensable

premisses of geometry, and was 'destroyed' in Plato's sense when Lobatchevsky, Bolyai, and Riemann showed that complete bodies of self-consistent geometrical theory can be deduced from sets of postulates in which Euclid's assumption is explicitly denied. There are two further points I should like to put before you in this connexion. One of them has been forcibly argued by Mr. Bertrand Russell in his admirable little work *The Problems of Philosophy*; the other has not. Indeed, it is just in his unwillingness to allow the second of these points to be raised at all that Mr. Russell seems to me to fall conspicuously and unaccountably short of being what, by his own showing, a great philosopher ought to be.

To take first the point with which Mr. Russell has dealt. There is one very important branch of inquiry, if we ought not rather to say that there are two, which appear to belong wholly to general Philosophy and not to any of the 'sciences'. We cannot so much as ask the simplest question without making the implication that there is an ultimate distinction between true assertions and false ones, and certain definite principles by which we can infer true conclusions from true premisses. It is thus a very important part of the true 'story of everything' to state the principles upon which valid reasoning depends, and to enunciate the ultimate postulates which have to be taken for granted whenever we try to reason validly about anything. This is the inquiry known by the name of logic. We cannot expect men whose time is fully taken up with the task of reaching true conclusions about some special class of facts, those which concern the history of living organisms, or the production and distribution of 'wealth', or the stability of various forms of government, to burden themselves with this inquiry in addition to their other tasks. They may fairly be allowed to leave the construction of logic to others. But the man who

makes it the business of his life to get back to ultimate first principles must plainly be a logician, though he need not be a specialist in biology or economics or 'sociology'. One great advantage which our children should have over their parents as students of Philosophy is that the last half-century has been one of unprecedented advance in the study of logic. In the 'logic of relations', founded by De Morgan, carried out further in the third volume of Ernst Schröder's *Algebra der Logik*, and made still more precise in the earliest sections of the *Principia Mathematica* of Whitehead and Russell, we now possess the most potent weapon of intellectual analysis ever yet devised by man.

We must further remark that the serious pursuit of any kind of science implies not only that there *are* truths, but that some of them, at least, can be *known* by man. Hence there arises a problem which is not quite the same as that of logic. What *is* the relation we mean to speak of when we talk of 'knowing' something, and what conditions must be fulfilled in order that a proposition may not only be true but be known by us to be true? The very generality of this problem marks it out as one which belongs to what I have been all along calling Philosophy. (We must be careful to note that the problem does not belong to the 'special science' of psychology. Psychology aims at telling us how particular thoughts and trains of thought arise in an individual mind, but it has nothing to say on the question which of our thoughts give us 'knowledge' and which do not. The 'possibility of knowledge' has to be presupposed by the psychologist as a pre-condition of his particular investigations exactly as it is presupposed by the physicist, the botanist, or the economist.) The study of the problem 'what are the conditions which must be satisfied whenever anything at all is known' is precisely what Kant meant by *Criticism*,

though the raising of the problem in this definite form is not due to Kant but goes back to Plato, who made it the subject of one of his greatest dialogues, the *Theactetus*. The simplest way to make the nature and importance of the problem clear is perhaps the way Mr. Russell adopts in the *Problems of Philosophy*—to give a very rough statement of Kant's famous solution.

Kant held that careful analysis shows us that any piece of knowledge has two constituents of very diverse origin. It has a *matter* or material constituent consisting, as Kant held, of certain crude data supplied by sensation, colours, tones of varying pitch and loudness, odours, savours, and the like. It has also a *form* or formal constituent. Our data, when we know anything at all, are arranged on some definite principle of order. When we recognize an object by the eye or a tune by the ear, we do not apprehend simply so much colour or sound, but colours spread out and forming a pattern or notes following one another in a fixed order. (If you reverse the movement of a gramophone, you get the same notes as before, but you do not get the same tune.) Further, Kant thought it could be shown that the data of our knowledge are a disorderly medley and come to us from without, being supplied by things which exist and are what they are equally whether any one perceives them or not, but the element of form, pattern, or order is put into them by our own minds in the act of knowing them. Our minds are so constructed that we *can* only perceive things or think of them as connected by certain definite principles of orderly arrangement. This, he thought, explains the indubitable fact that we can sometimes know universal propositions to be true without needing to examine all the individual instances. I can know for certain that in every triangle the greater angle is subtended by the greater side, or that every event has a definite cause

among earlier events, though I cannot examine all triangles or all events one by one. This is because the postulates of geometry and the law of causality are types of order which my mind *puts* into the data of its knowledge in the very act of attending to them, and it is therefore certain that I shall never perceive or think anything which does not conform to these types.

I give Kant's answer to the problem of Criticism not because I believe it to be the correct one, but to show what important consequences follow from our acceptance of a solution of this problem. If it is true that one of the constituent elements of every piece of knowledge is a lump of crude sensation, it follows that we can have no knowledge about our own minds or souls, and still less about God, since, if there are such beings as my soul and God, at any rate neither furnishes me with sense-data. Hence a great part of Kant's famous *Critique of Pure Reason* is taken up by an elaborate attempt to show that psychology and theology contain no real knowledge. We cannot even know whether there is any probability for or against the existence of the soul or of God, though Kant was very anxious to show that it is our duty on moral grounds to *believe* very firmly in both. Now if Kant is right about this, his result is tremendously important. If psychology and theology are wholly devoid of scientific value, it is most desirable that we should know this, not only that we may not waste time in studying them, but because it may reasonably make a very great difference to the practical ordering of our lives. If Kant can be proved wrong, it is equally important to be convinced that he is wrong. We may have been led by belief in his teaching to neglect the acquisition of a great deal of knowledge of high intrinsic interest, and may even have been betrayed into basing the conduct of life on wrong principles. If, for example, we can really know something

about the soul, it *may* be possible to know whether it is immortal or not, and it is not unreasonable to hold that certain knowledge, or even probable belief, on such a point ought to make a great difference to our choice between rival aims in life. There is clearly much less to be said for the recommendation to ' eat and drink for to-morrow we die ' if we have reason to believe our souls immortal than if we have not, and some of us do not share Mr. Russell's view that Philosophy is called upon to abdicate what the Greeks thought her sovereign function, the regulation of life. It is true that Kant convinced himself that it is a moral duty to act as if we knew the truth of doctrines for or against which we cannot detect the slightest balance of probability. But the logically sound inference from Kant's premisses would be that, to use Pascal's famous metaphor, a prudent man will do well to bet neither for nor against immortality. Unfortunately, as Pascal said, you can't *help* betting ; *il faut parier.* If it makes any difference to the relative values of different goods whether the soul dies with the body or not, one *must* take sides in the matter. In making one's choices one must prefer either the things it is reasonable to regard as good for a creature whose days are threescore years and ten or those which it is reasonable to regard as best for a being who is to live for ever. The only way to escape having to bet is not to be born.

I come to the second problem, the one which, as I think, Mr. Russell arbitrarily ignores. A human being is not a mere knowledge-machine. The relation of knower to known is not the only relation in which he stands to himself and to other things. The ' world ' is not merely something at which he can look on, it is also an instrument for achieving what he regards as good and for creating what he judges to be beautiful. To do good and to make beautiful things are just as much man's business as to

discover truth. A knowledge of the world would be very incomplete if it did not include knowledge of what ought to be, whether because it is morally best or because it is beautiful, as well as knowledge of what is actually there. And it is not immediately evident how the two, knowledge of what ought to be and knowledge of what merely is, are connected.

There is, to be sure, one way in which it is pretty plain that they are *not* related. You cannot learn what ought to be—what is beautiful or morally good—merely by first finding out what has been or what is likely to be. This simple consideration of itself deprives many of the big volumes which have been written about the 'evolution' of art and morals of most of their value. They may have interest if they are treated only as contributions to the history of opinion about art and morals. But unhappily their authors often assume that we can find out what really *is* right or beautiful by merely discovering what men have thought right and beautiful in the remote past or guessing what they will think right or beautiful in the distant future. The fallacy underlying this procedure has been happily exposed by Mr. Russell himself in an occasional essay where he remarks that it is antecedently just as likely that evolution is going from bad to worse as that it is going from good to better. *Unless* it is going from bad to worse it is obviously absurd to suppose that you can find out what *is* good by discovering what our distant ancestors *thought* good. And *if* (as may be the case) it is going from bad to worse, no amount of knowledge about what our posterity will think good can throw any light on the question what is good. There is, in fact, no ground whatever for believing that 'evolution' need be the same thing as progress, and this is enough to knock the bottom out of 'evolutionary ethics'.

On the other hand, it is quite certain that when we call

an act right or a picture beautiful we do not mean to be expressing a mere personal liking of our own, any more than when we make a statement about the composition of sulphuric acid or the product of 9 and 7. As Dr. Rashdall has put it, when we say that a given act is right, we do not pretend to be infallible. We know that we may fall into mistakes about right and wrong just as we may make mistakes in working a multiplication sum. But we do mean to say that *if* our own verdict 'that act is right' is a true one, then the verdict of any one who retorts 'that act is wrong' is false, just as when we state the result of our multiplication we mean to assert that *if* we have done the sum correctly any one else who brings out a different answer has worked it wrongly. Indeed, we might convince ourselves that these verdicts are not meant to be expressions of private and personal liking in a still simpler way. All of us must be aware that the line of action we pronounce 'right' is not always what we like nor the conduct we call 'wrong' what we dislike. We often like doing what we fully believe to be wrong and dislike doing what we believe right, without being in the least confused in our moral verdicts by this collision of liking and conviction. So again it is a common thing to like one poem or picture better than another, and yet to be fully persuaded that the work we like the less is the better work of art. Indeed, the whole process of moral and aesthetic education may be said to exist just in learning to like most what is really best.

All this, put into so many words, may seem too simple to call for statement, but it makes nonsense of a great deal that has been written about ethics of late years. It disposes once for all of the theory that moral and aesthetic verdicts are 'subjective', that is, that they mean no more than that the persons who make them have certain

personal likes and dislikes of which these verdicts are a record. Of course, it might be urged that all of us do indeed mean to express truths which are independent of our personal likings when we make moral and aesthetic judgements, but that we never succeed in doing so. A man might conceivably hold that there is no real distinction between right and wrong or between beautiful and ugly, but that it is a universal illusion of mankind to suppose that there are such distinctions. Or he might hold that the distinctions are real, but that we do not know where to draw them. He might suggest that some ways of acting are really right and others really wrong, but that we do not know which are the right acts and so regularly confuse what we like doing with what is ' really ' right. Mr. Russell, in some of his later writings, seems to incline to views of this sort. But the suggestion is really unmotived. It would be just as reasonable to suggest that all geometrical or astronomical propositions are only expressions of the personal and private feelings of geometers and astronomers, and that either there is no distinction between truths and falsehoods in geometry and astronomy, or that, at any rate, we do not know which the true propositions are. That there is a real distinction between true and false propositions and that, with pains and care, we can discover some truths, are assumptions we must make if we are to recognize the possibility of pursuing knowledge at all, and there is no reason to suppose that these assumptions do not hold as good in matters of art and morals as elsewhere. No doubt, in practice men are prone to mistake what they like for what is right or beautiful, but this danger, such as it is, is not confined to art and morals. Men do often call acts right merely because they like doing them or pictures beautiful merely because they get pleasure from them. But it is also notorious that many men are

prone to believe that a thing is likely to happen merely because they wish it to happen, or that it is unlikely to happen merely because they wish it not to happen. Yet no one seriously makes the reality of these tendencies a ground for denying the possibility of 'inferring the future from the past'. We must then, I hold, regard it as an integral part of the whole story of everything to find an answer to the questions What is good? and What is beautiful? as well as to the question What is fact? By the side of the so-called 'positive sciences', which deal with the third question, we must recognize as having an equal right to exist the so-called 'sciences of value', which deal with the first and the second.

I want now to take a further step in which disciples of Mr. Russell would perhaps decline to follow me. We have already seen what is meant by the co-ordination of the sciences into a single body of deductions from definite ultimate postulates, though in what we have said about the task we were content to speak provisionally as if the sciences of 'what is' were all the sciences to be co-ordinated. We talked, in fact, as if the work of Philosophy were merely to work into a coherent story all that can be known of 'objects that present themselves to the contemplation' of a knower. But, of course, if Philosophy is ever to attack its final problem, we must take into account two things which we have so far ignored. The 'whole story of everything' includes the knowing intelligence itself as well as the 'objects' which present themselves to its gaze. Indeed, it is not even accurate to speak as if 'objects' 'presented themselves' to a merely passive intelligence; to be apprehended, they have to be actively attended to. If we would see them, we have to be on the look-out for them. And the knowing intelligence is not aware merely of these objects. It is also aware of itself, though

it is certainly never a 'presented object'. Also, it is not only a knower but a doer and a maker. Intelligence is shown as much in the ordering of life by a rule based on a right valuation of goods and in the making of things of beauty as in the discovery of propositions about what is. Hence, we can hardly be content to leave the 'positive' sciences and the 'sciences of values' simply standing over against one another. There is that which 'is', and there is that which 'ought to be', and, at first sight at any rate, the two seem very different. Much that is—ignorance, sin, misery, ugliness—ought not to be, and much that ought to be is very far from being fact. We are accustomed to regard this as a matter of course, but, closely considered, it is perhaps the supreme wonder of all the wonders. We creatures of circumstance, as we call ourselves, can take stock of the sum of things to which we belong, and judge it. It is not simply that we can, and often do, *wish* that it were different in various ways; we can judge that it *ought* to be different, and you may find a man of science like Huxley, after a life spent in trying to understand the laws which prevail in the world, deliberately making it his last word to his fellows that their duty is to set themselves to reverse the 'cosmic process', to select for preservation just the human types which, if the much-abused metaphor may be tolerated, Nature, left to herself, selects for destruction.

We might, of course, regard this apparently unreconcilable conflict between the arrangements which do prevail, as is commonly supposed, in the world, and those which ought to prevail, as a mystery which we must despair of ever understanding. But, to say the least of it, it is hardly consistent with the philosophic temper to treat any question as an insoluble riddle until one has tried all ways of solution and found them *culs-de-sac*. If we are to be thoroughly loyal to the spirit which

prompts all intelligent inquiry, we are bound at least to ask whether it is, after all, beyond the power of human intelligence to think of the world as a system in which somehow, in the end, what ought to be prescribes what is. It is true that, for reasons already mentioned, we cannot, like Spinoza or the Sufis, reconcile facts and values by the simple assumption that what is is shown, by the fact that it is, to be what ought to be, and that our common conviction that sin and ugliness are painfully real is only an illusion due to spiritual short sight. We have just as much reason to believe that some pleasures are good, that pain which is not a means to good is evil, that justice and purity are good, lewdness and cruelty bad, that some colours are lovely and others odious, as we have to believe that between any two points there is always a third, or that, if $B$ and $C$ are two points there is always a point $D$ on the straight line $BC$ such that $C$ is between $B$ and $D$, and a point $A$ on $CB$ such that $B$ is between $C$ and $A$. Indeed, the most fanatical champion of what Mr. Russell in his anti-ethical mood calls ' ethical neutrality ' cannot well avoid recognizing the truth of at least one proposition in ethics, the proposition that knowledge of scientific truth is *better* than ignorance of it. The admission of this single truth of value is enough to raise all the time-honoured problems of ethics and theodicy. If knowledge of truth is better than ignorance of it, the actual present state of the world, in which so much truth is yet to seek, is by no means wholly good, and there really is at least one way in which it is our duty to make it more like what it ought to be.

If then we cannot get rid of the apparent conflict between Is and Ought by saying that Ought is an illusion, can we get rid of it, in the only other possible way, by holding that what ought to be is the lasting and primary reality and that the ' facts ' which are so far from being

what they ought to be are by comparison only half-real, much what shadows are to the solid things which throw them? This was the doctrine of Plato, who makes Socrates say in the *Phaedo* that it is the 'Good' which holds the Universe together, and that in the end the true reason for each particular arrangement in the world, whether we can see it or not, is that it is 'best' that this arrangement, and no other, should exist. It is also the foundation of Kant's well-known contention that, however barren speculative theology and psychology may be, the reality of the moral order and the unconditionality of moral obligation compel us to make the existence of God, the immortality of our souls, and the moral government of the world postulates of practical philosophy. More generally, it is just this conviction that 'what is' has its source and explanation in what 'ought to be', which is the central thought of all philosophical Theism. If we can accept such a faith, we shall not, of course, be enabled to eliminate mystery from things. We shall, for instance, be still quite in the dark about the way in which evil comes to be in a world of God's making. We shall neither be able to say *how* any particular thing comes to be other than it ought to be, nor *how* in the end good is 'brought out of evil'. But if we are to have a right to hold a view of the Platonic or Theistic type, we must be able, not indeed to say how evil comes about or how it is to be finally got rid of, but to say, in a general way, what it is 'good for'. Thus, if there are certain goods of the highest value which could not exist at all except on the condition of the existence of less important evils, this consideration will remove, so far as *those* goods and evils are concerned, the time-honoured puzzle how evil can exist at all if God is. To take a specific example. To many of us it appears directly certain that such qualities of character as fortitude, patience, superiority

to carnal lusts, magnanimity, are goods of the highest value. We think also that we see that these qualities are not primitive psychological endowments but require for their development the experience of struggle and discipline in a world where there is real suffering, real disappointment, real temptation. To us, therefore, there seems to be no contradiction between the existence of God and the presence in a world made by God of the evils needed for the development of these virtues. And this will include some of the worst of all the evils we know of. Few things are more ghastly than some of the cruelties which have been practised in the late War and are still being practised in the distracted country of Russia. Yet we know how revulsion from these horrors has made many a man who seemed to be sunk in sloth or greed or carnality into a Bayard or a Galahad. It may well be that this moral re-birth would never have been effected if the evils which provoked it had been less monstrous. Here, then, we seem to discern a principle which *may* be adequate to explain what all the ills of human life are ' good for '.

I must not deny that all such explanation, in my judgement, involves the postulate that the ennoblement of character and deepening of insight brought about by suffering are permanent—in fact, that it requires the postulates of the existence of God and the reality of everlasting life. Mr. Russell, I imagine, would regard this as a confession that I am sunk in what he airily dismisses as ' theological superstitions '. I should reply that the ' superstition ' is on his side ; to dismiss God and the eternal soul, without serious inquiry, as ' superstitions ' is just the most superficial of all the superstitions. It is, of course, incumbent on anyone who holds the Platonic view to show that its postulates are not inconsistent with any known truth, and I would add that he

ought also to show that there are at any rate known facts which seem to demand just this kind of explanation. Both these points, as I hold, can be established, but I do not in the least wish to suggest that any philosopher will ever find it an easy task to 'justify the ways of God to man'. As Timaeus says in Plato, 'to find the father and fashioner of the Universe is *not* easy', and I want rather to lay stress on the magnitude of the task than to extenuate it. But I am concerned to urge that the doctrine which accounts for what is by what ought to be is the *only* philosophical theory on which it ceases to be an unintelligible mystery that we should have—as I maintain we certainly have—the same kind of assurance about values that we have about facts. The chief complaint I have to make about the mental attitude of Mr. Russell and some of his friends is that, in their zeal for the unification of science, they seem inclined to assume that the larger problem of the co-ordination of Science with Life does not exist, or, at any rate, need not occupy our minds. This is what I should call mere atheistic superstition. On this point they might, I believe, learn much which it imports them to know from the works of some of the notable living philosophers of Italy, in particular from Professor Varisco of Rome and Professor Aliotta of Padua, whose labours have been specially directed to the co-ordination in a consistent system of the principles of the sciences of fact with those of the sciences of value. Though, after all, those who have refused to learn the lesson from the noble philosophical work of Professor James Ward, the illustrious champion of sober thought in their own University of Cambridge, are perhaps unlikely to master it in the schools of Rome or Padua.

You will readily see that I am suggesting in effect that if Philosophy is ever to execute her supreme task, she

will need to take into much more serious account than it has been the fashion to do, not only the work of the exact sciences but the teachings of the great masters of life who have founded the religions of the world, and the theologies which give reasoned expression to what in the great masters is immediate intuition. For us this means more particularly that it is high time philosophers ceased to treat the great Christian theologians as credulous persons whose convictions need not be taken seriously and the Gospel history as a fable to which the 'enlightened' can no longer pay any respect. They must be prepared to reckon with the possibility that the facts recorded in the Gospel happened and that Catholic theology is, in substance, true. If we are to be philosophers in earnest we cannot afford to have any path which may lead to the heart of life's mystery blocked for us by placards bearing the labels 'reactionary', 'unmodern,' and their likes. That what is most modern must be best is a superstition which it is strange to find in a really educated man—especially after the events of the last five years. A philosopher, at any rate, should be able to endure the charge of being 'unmodern' with fortitude. It is at least a tenable thesis that many of the qualities which we Western men have been losing in our craze for industrialism and commercialistic 'Imperialism' are just those which are most necessary to the seeker after speculative truth. Abelard and St. Thomas would very likely have failed as advertising agents, company promoters, or editors of sensational daily papers. But it may well be that both of them were much better fitted than Lord Northcliffe, Mr. Bottomley, or Mr. A. G. Gardiner to tell us whether God is and what God is. In fact, one would hardly suppose habitual and successful composition of effective 'posters' or alluring prospectuses to be wholly compatible with that candour and scrupulous veracity

which are required of the philosopher. As for 'reaction', no one but a writer in a 'revolutionary' journal would be fool enough to use the word as, in itself, an epithet of reproach. Most persons who have a bowing acquaintance with Mechanics know that you cannot have an engine in which there is all action and no reaction, and most sane men can see that before you pronounce a given 'reaction' good or bad you need to know what it is reacting against. If a man who wants to go east discovers that he is walking west, he is usually reactionary enough to go back on his steps.

In short, if we mean to be philosophical, our main concern will be that our beliefs should be true; we shall care very little whether they happen to be popular or unpopular with the intellectual 'proletarians' of the moment, and if we can get at a truth, we shall not mind having to go back a long way for it. Indeed, when one wants to get on the track of the most ultimate and important truths of all, there is usually a great positive advantage in going back a very long way for them. The questions which deal with first principles, being the simplest—though the hardest—of all, are mostly raised very simply and directly by Plato and Aristotle, who were the very first writers to raise them. In the discussions of later times, the great simple questions about principles have so often been overlaid by mainly irrelevant accretions of secondary details that it is usually very hard indeed 'to see the wood for the trees'. This is the chief reason why one who, like myself, finds it his main business in life to introduce younger men and women to the study of Philosophy must think indifference to Greek literature about the worst misfortune which could happen to our intellectual civilization.

I have tried in what I have said so far to explain what I understand by the philosophical spirit and what I regard

as the primary problems with which Philosophy has to wrestle. If what I have said is not wholly wide of the mark, it should be clear what is the deadliest enemy of the true spirit of Philosophy. It is the temper which is too indolent to think out a question for itself and consequently prefers to accept traditional ready-made answers to the problems of Science and Life. Traditionalism, wherever it is found, is the enemy, because Traditionalism is only another name for indolence. Observe that I say Traditionalism, not Tradition. Nowhere in life, and least of all in Philosophy, is the solitary likely to work to much purpose unless he has behind him that body of organized sound sense which we call Tradition. And I do not mean that true philosophers are necessarily 'heretics', or that 'orthodoxy' is less philosophical than 'heterodoxy'. I mean that however true an 'orthodox' proposition may be, it is no living truth for me unless I have made it my own, as its first discoverer did, by personal labour of the spirit. The truth is something which each generation must rediscover for itself. True traditions may be quite as injurious, if they have become mere traditions, as false ones. It was not so much because the Aristotelian doctrines were false that the unquestioning acceptance of Aristotelian formulae all but strangled human thought in the later days of Scholasticism. Some of these doctrines were false, but many of them were much truer than anything the seventeenth and eighteenth centuries had to put in their place, and the rediscovery of their real meaning is perhaps the chief service of the Hegelian school to Philosophy. The trouble was that mechanical repetition of Aristotle's formulae as matters of course inevitably led to loss of real insight into the meaning the formulae had borne for Aristotle.

We may say, generally, that because Traditionalism is the death of sound thinking, the ages in which the

prospects of advance in Philosophy are brightest are just those in which a powerful historical tradition has broken down and men feel themselves compelled to go back on their steps and raise once more the fundamental questions which their fathers had supposed to be disposed of once for all by a formula. This has happened twice since the downfall of the degenerate Scholasticism, Protestant and Roman, of the sixteenth century. In the seventeenth century the result was the great movement in Philosophy, Mathematics, and Physics, of which Descartes and Galileo are the principal figures. Towards the end of the eighteenth century, when the doctrines of Descartes had themselves been traditionalized, the same thing happened again, the leading actors in the drama being David Hume and Immanuel Kant ; the result was first the revival of the 'critical' problem by Kant, and then the great, if over-hasty, attempt at a positive interpretation of the Universe which culminated in the philosophical system of Hegel. In our own age, it is mainly Kant and Hegel who have been traditionalized, and we seem to be living through the last stages of the discrediting of this third tradition with every prospect of a great advance if our own time can only find its Descartes. In what I am going on to say I must naturally speak of the disintegrating influences chiefly as we have seen them at work in our own country ; but I should like, before I do so, to remark that on the Continent splendid work has been done in the requickening of genuine philosophical thought by an influence which has, so far, not made itself widely felt among ourselves. I mean the revival of Thomism so earnestly promoted in the academies of the Roman Church by Pope Leo XIII. Neo-Thomism, I am convinced, if its representatives will only maintain it at the high level characteristic, for example, of the Italian *Rivista Neo-Scolastica,* has a very great contribu-

tion to make to the Philosophy of the future, and is much more deserving of the serious attention of students in our own country than the much-advertised 'impressionism' of Pragmatists and Bergsonians. Indeed, I hardly know how much we may not hope from the movement if it should please Providence to send into the world a Neo-Thomist who is also a really qualified mathematician.

Of the state of thought in our own country we may fairly say that a generation ago opinion on the ultimate questions was, in the main, fairly divided into two camps. There were the professional metaphysicians, mainly living on a tradition derived from Kant and Hegel, and there were the men of science whose 'philosophy', such as it was, is perhaps best represented by two well-known and most instructive books, Mach's *Science of Mechanics* and Karl Pearson's *Grammar of Science*. The men of the Kant-Hegel tradition, whatever their family dissensions, were generally united by the common view that—as William James accused them of teaching—the function of sensation in contributing to knowledge, whatever it is, is something 'contemptible'. Kant himself, as we have seen, had thought very differently, but he was supposed to have been 'corrected' on this, as on so many points, by Hegel. The most distinguished of my own Oxford teachers seemed agreed to believe that our thought builds up the fabric of knowledge entirely from within by what Hegel called an 'immanent dialectic'. A rough idea of what this means may be given in the following way. You take any experience you please and try to put what you experience into a proposition. The proposition may, to begin with, be as vague as, e. g. 'I am now feeling something,' 'I am now aware of something.' On reflection you find that the statement does not do justice to the experience. You feel the need to say more

precisely *what* you are feeling or are aware of, how it is related to what you experience on other occasions, and what the 'I' is which is said to 'have' the experience. Until you have done this your thought is a miserable reproduction of your experience, and if you could ever do it completely, it would turn out that a really adequate account of the most trivial experience would involve complete knowledge of the structure and working of everything. Thus, if you once begin to think about your experience at all, you are irresistibly driven on to endless further reflection. If you try to stop short anywhere in the process, the results of your reflection are found to contain unexplained contradictions, just because you have not yet fitted on the fact on which you are reflecting to everything else there is to know. All the assumptions of every-day 'common sense' and all the more recondite assumptions of the sciences are saturated with these contradictions, because both 'common sense' and the sciences leave so much of the whole 'story of everything' untouched. If the whole story were told, all things would be found to be just one thing, which these philosophers call the 'Absolute', and the only perfectly true statement we can make would be a statement about this Absolute in which we asserted of it all that it is. Since no science ever attempts to say anything at all about this one sole thing, far less to get all there might be to be said about it into a single statement, no scientific proposition can be more than 'partially' true, and unhappily *we* do not know what alterations would be required to make our 'partial' truths quite true. Naturally enough Kant's allegation that mathematical first principles are so self-contradictory that you can rigidly demonstrate mathematical propositions which contradict each other was grist to the Hegelian mill. That our notions of space, time, the infinitely great, the infinitely little, are all

a jumble of contradictions was steadily repeated by the Hegelian philosophers, and indeed the mathematicians were accustomed to state their own principles so loosely and confusedly that there was a great deal of excuse for the suspicion that the fault lay with Mathematics and not with the mathematicians.

It is clear that such a philosophy ought to end in unqualified Agnosticism. The Hegelians, to be sure, made merry over the Unknowable of Mr. Spencer, but their own Absolute is really just the Unknowable in its 'Sunday best'. Nothing that we can say about anything which is not the Absolute is really true, because there really *is* nothing but the Absolute to speak about, and nothing that we can say about the Absolute is quite true either, because we can never succeed in saying itself of it. Mr. Bradley, far the most eminent of the philosophers of the Absolute, has made persistent and brilliant attempts to show that, in spite of this, we do know enough to be sure that our own mind is more like the Absolute than a cray-fish, and a cray-fish more like it than a crystal. But when all is said, though I owe more to Mr. Bradley than I can ever acknowledge adequately, I cannot help feeling that there are two men in Mr. Bradley, a great constructive thinker and a subtle destructive critic, and that the destructive Hyde is perpetually pulling to pieces all that the constructive Jekyll has built up. Of course it is obvious that the truth of mathematics, if mathematics are true, is a fatal stone of stumbling for this type of philosophy. Mathematics never attempts to say anything about the 'Absolute'—the only 'Absolute' of which it knows is only a 'degraded conic'—yet it claims that its statements, if once they have been correctly expressed, are not 'partial' but complete.

Over against the Hegelianizing philosophers, we had, of course, the men of science. No one could wish to

speak of the scientific men of the days of Huxley without deep respect for their success in adding to our positive knowledge of facts. But it may perhaps be said at this distance of time that it was not precisely the greatest among them who were most prominent as mystagogues of Science with the big S, and it may certainly be said that when the mystagogues, the Cliffords, Huxleys, and the rest, undertook to improvise a theory of first principles, their achievement was little better than infantile. They took it on trust from Hume that the whole of knowledge is built up of sensations, actual or 'revived', and quite missed Kant's point that their empiricism left the formal constituent in knowledge, the type of order by which data are organized into an intelligible pattern, wholly out of account. Even when they deigned to read Kant, they read him without any inkling of the character of the 'critical' problem. Hence they taught dogmatically as true a theory of scientific method which Hume himself had elaborately proved impossible. It was just because Hume had seen so clearly that no universal scientific truths can be derived from premisses which merely record particular facts that he professed himself a follower of the 'academic' or 'sceptical' philosophy. He recognized the impossibility of constructing scientific knowledge out of its material constituent alone, but did not see where the formal constituent could come from, and so resigned himself to regarding the actual successes of science as a kind of standing miracle.

The men of the 'seventies were, after all, in many cases more anxious to damage theology than to build up Philosophy. They read Hume without any delicate sense for his urbane ironies, and believed in good faith that he and John Stuart Mill between them had shown that by a mysterious process called 'induction' it is

possible to prove rigorously universal conclusions in science without universal premisses. A scientific law, according to them, is only a convenient short-hand notation in which to register the 'routine of our perceptions'. Thus we have known of a great many men who have died, and have never known of any man who lived to much over a hundred without dying. The universal proposition 'all men are mortal' is a short expression for this information, and it is nothing more. It ought to have been obvious that, if this is a true account of science, all scientific 'generalizations' are infinitely improbable. The number of men of whom we *know* that they have died is insignificant by comparison with the multitude of those who have lived, are living, or will live, and we have no guarantee that this insignificant number is a fair average sample. So again, unless there are true universal propositions which are not 'short-hand' for any plurality of observed facts whatever, we cannot with any confidence, however faint, infer that a 'regular sequence' or 'routine' which has been observed from the dawn of recorded time up to, say, midnight, August 4, 1919, will continue to be observed on August 5, 1919. How, except by relying on the truth of some principle which does not depend itself on the validity of 'generalization', can we tell that it is even slightly probable that the nature of things will not change suddenly at the moment of midnight between August 4 and August 5, 1919? What is called 'inductive' science certainly has 'pulled off' remarkable successes in the past, but we can have no confidence that these successes will be repeated unless there are much better reasons for believing in its methods and initial assumptions than any which the scientific man who is an amateur 'empiricist' in his philosophy can offer us. We may note, in particular, that this empiricism, which has been

1046

expounded most carefully by Pearson and Mach, coincides with Hegelian Absolutism in leading to the denial of the truth of mathematics. It would be a superfluous task to argue at length that, e. g., De Moivre's theorem or Taylor's theorem is not a short-hand formula for recording the 'routine of our perceptions'.

The general state of things at the time of which I am speaking was thus that relations were decidedly strained between a body of philosophers and a body of scientific men who ought at least to have met on the common ground of a complete Agnosticism. The philosophers were, in general, shy of Science, mainly, no doubt, because they were modest men who knew their own limitations, but they had a way of being condescending to Science, which naturally annoyed the scientific men. These latter professed a theory of the structure of knowledge which the philosophers could easily show to be grotesque, but the retort was always ready to hand that at any rate Science seemed somehow to be getting somewhere while Philosophy appeared to lead nowhere in particular.

The conditions for mutual understanding have now greatly improved, thanks mainly to the labour of mathematicians with philosophical minds on the principles of their own science. If we admit that mathematics is true—and it seems quite impossible to avoid the admission—we can now see that neither the traditional Kant-Hegel doctrine nor the traditional sensationalistic empiricism can be sound. Not to speak of inquiries which have been actually created within our own life-time, it may fairly be said that the whole of pure mathematics has been shown, or is on the verge of being shown, to form a body of conclusions rigidly deduced from a few unproved postulates which are of a purely logical character. Descartes has proved to be right in his view that the exceptional certainty men have always ascribed to

mathematical knowledge is not due to the supposed restriction of the science to relation of number and magnitude—there is a good deal of pure mathematics which deals with neither—but to the simplicity of its undefined notions and the high plausibility of its unproved postulates. Bit by bit the bad logic has been purged out of the Calculus and the Theory of Functions and these branches of study have been made into patterns of accurate reasoning on exactly stated premisses. It has appeared in the process that the alleged contradictions in mathematics upon which the followers of Kant and Hegel laid stress do not really exist at all, and only seemed to exist because mathematicians in the past expressed their meaning so awkwardly. Further, it has been established that the most fundamental idea of all in mathematics is not that of number or magnitude but that of *order* in a series and that the whole doctrine of series is only a branch of the logic of Relations. From the logical doctrine of serial order we seem to be able to deduce the whole arithmetic of integers, and from this it is easy to deduce further the arithmetic of fractions and the arithmetic or algebra of the 'real' and 'complex' numbers. As the logical principles of serial order enable us to deal with infinite as well as with finite series, it further follows that the Calculus and the Theory of Functions can now be built up without a single contradiction or breach of logic. The puzzles about the infinitely great and infinitely small, which used to throw a cloud of mystery over the 'higher' branches of Mathematics, have been finally dissipated by the discovery that the 'infinite' is readily definable in purely ordinal terms and that the 'infinitesimal' does not really enter into the misnamed 'Infinitesimal Calculus' at all. Arithmetic and the theory of serial order have been shown to be the sufficient basis of the whole science which, as Plato long

ago remarked, is ' very inappropriately called geometry '. A résumé of the work which has been thus done may be found in the stately volumes of the *Principia Mathematica* of Whitehead and Russell, or—to a large extent—in the *Formulario Matematico* of Professor Peano. Of other works dealing with the subject, the finest from the strictly philosophical point of view is probably that of Professor G. Frege on *The Fundamental Laws of Arithmetic*. The general result of the whole development is that we are now at last definitely freed from the haunting fear that there is some hidden contradiction in the principles of the exact sciences which would vitiate all our knowledge of universal truths. This removes the chief, if not the only ground for the view that all the truths of Science are only ' partial '. At the same time, the proof that pure mathematics is a strictly logical development and that all its conclusions are of the hypothetical form, ' if *a b c* . . ., then *x* ' definitely disproves the popular Kantian doctrine that *sense*-data are a necessary constituent of scientific knowledge. And with this dogma falls the *main* ground for the denial that knowledge about the soul and God is attainable. The recovery of a sounder philosophical method has, as Mr. Russell himself says, disposed of what was yesterday the accepted view that the function of Philosophy is to narrow down the range of possible interpretations of facts until only one is left. Philosophy rather opens doors than shuts them. It multiplies the number of logically possible sets of premisses from which consequences agreeing with empirical facts may be inferred. Mr. Russell's unreasoned anti-theism seems to me to make him curiously blind to an obvious application of this principle. On the other side, the revived attention to the logical methods of the sciences is killing the crude sensationalism of the days which saw the first publication

of Mach's *Science of Mechanics* and Pearson's *Grammar of Science*. The claims of 'induction' to be a method of establishing truths may be fairly said to have been completely exposed. It is clearer now than it was when Kant made the observation that each of the 'sciences' contains just so much science as it contains mathematics, and that the Critical Philosophy was fully justified in insisting that all science implies universal *à priori* postulates, though it went wrong in thinking that these postulates are laws of the working of the human mind or are 'put into' things by the human mind. How far Science has moved away from crude sensationalistic empiricism may be estimated by a comparison of the successive editions of the *Grammar of Science*. It must always have been apparent to an attentive reader that the chapters of that fascinating book which deal directly with the leading principles of Physics and Biology are of very different quality from the earlier chapters which expound, with many self-contradictions and much wrath against metaphysicians and theologians whom the writer seems never to have tried to understand, the fantastic 'metaphysics of the telephone-exchange'. But the difference of quality is more marked in the second edition than in the first, and in the (alas!) unfinished third edition than in the second. So far, then, as the problem of the unification of the sciences is concerned, the old prejudices which divided the rationalist philosopher from the sensationalist scientific man seem to have been, in the main, dissipated. We can see now that what used to be called Philosophy and what used to be called Science are both parts of one task, that they have a common method and presuppose a common body of principles.

So far it may be said with truth that Philosophy is becoming more faithful than Kant was himself to the leading ideas of 'Criticism', and again that it is reverting

once more, as it reverted in the days of Galileo, to the positions of Plato. I do not mean that the whole programme has been completely executed and that there is nothing for a successor of Frege or Russell to do. It is instructive to observe that at the very end of the great work on arithmetic to which I have referred Frege found himself compelled by difficulties which had been overlooked until Russell called attention to them to add an appendix confessing that there was a single important flaw in his elaborate logical construction of the principles of arithmetic. He had shown that if there are certain things called ' integers ', defined as he had defined them, the whole of arithmetic follows. But he had not shown that there *is* any object answering to his definition of an integer, and the logical researches of Russell had thrown some doubt on the point. This proved that some restatement of the initial assumptions of the theory was needed. Since the date of Frege's appendix (1903), Mr. Russell and others have done something towards the necessary rectification, and the resulting ' Theory of Types ' is pretty certainly one of the most important contributions ever made to logical doctrine, but it may still be reasonably doubted whether the ' Theory of Types ', as expounded by Whitehead and Russell in their *Principia Mathematica*, is the last word required. At any rate, it seems clear that it is a great step on the right road to the solution of a most difficult problem.

There still remains the greatest problem of all, the harmonization of Science and Life. I cannot believe that this problem is an illegitimate one, or that we must sit down content to accept the severance of ' fact ' and ' value ' as final for our thought. Even the unification of the sciences itself remains imperfect so long as we treat it as merely something which ' happens to be the case ' that there are many things and many kinds of

things in the universe and also a number of relations in which they ' happen ' to stand. It is significant that in his later writings Mr. Russell has been driven to abandon the concept of personal identity, which is so fundamental for practical life, and to assert that each of us is not one man but an infinite series of men of whom each only exists for a mathematical instant. I am sure that such a theory requires the abandonment of the whole notion of value as an illusion, and even more sure that it is ruinous to any practical rule of living, and I cannot believe in the ' philosophy ' of any man who is satisfied to base his practice on what he regards as detected illusion. Hence I find myself strongly in sympathy with my eminent Italian colleague Professor Varisco, who has devoted his two chief works (*I Massimi Problemi* and *Conosci Te Stesso*) to an exceedingly subtle attempt to show that ' what ought to be ', in Platonic phrase ' the Good ', is in the end the single principle from which all things derive their existence as well as their value. Mr. Russell's philosophy saves us half Plato, and that is much, but I am convinced that it is whole and entire Plato whom a profounder philosophy would preserve for us. I believe personally that such a philosophy will be led, as Plato was in the end led, to a theistic interpretation of life, that it is in the living God Who is over all, blessed for ever, that it will find the common source of fact and value. And again I believe that it will be led to its result very largely by what is, after all, perhaps the profoundest thought of Kant, the conviction that the most illuminating fact of all is the *fact* of the absolute and unconditional obligatoriness of the law of right. It is precisely here that fact and value most obviously meet. For when we ask ourselves what in fact we are, we shall assuredly find no true answer to this question about what *is* if we forget that we are first and foremost

beings who *ought* to follow a certain way of life, and to follow it for no other reason than that it is good. But I cannot, of course, offer reasons here for this conviction, though I am sure that adequate reasons can be given. Here I must be content to state this ultimate conviction as a 'theological superstition', or, as I should prefer to put it with a little more certainty, as a matter of faith. The alternative is to treat the world as a stupid, and possibly malicious, bad joke.

*Note.*—It may be thought that something should have been said about the revolt against authority and tradition which has styled itself variously 'Pragmatism' and 'Humanism', and also about the recent vogue of Bergsonianism. I may in part excuse my silence by the plea that both movements are, in my judgement, already spent forces. If I must say more than this, I would only remark about Pragmatism that I could speak of it with more confidence if its representatives themselves were more agreed as to its precise principles. At present I can discern little agreement among them about anything except that they all show a great impatience with the business of thinking things quietly and steadily out, and that none of them seems to appreciate the importance of the 'critical' problem. 'Pragmatism' thus seems to me less a definite way of thinking than a collective name for a series of 'guesses at truth'. Some of the guesses may be very lucky ones, but I, at least, can hardly take the claims of unmethodic guessing to be a philosophy very seriously. To 'give and receive argument' appears to me to be of the very essence of Philosophy. As for M. Bergson, I yield to no one in admiration for his brilliancy as a stylist and the happiness of many of his illustrations. But I have always found it difficult to grasp his central idea—if he really has one—because his whole doctrine has always seemed to me to be based upon

a couple of elementary blunders which will be found in the opening chapter of his *Données Immédiates de la Conscience*. We are there called on to reject the intellect in Philosophy on the grounds (1) that, being originally developed in the services of practical needs, it can at best tell us how to find our way about among the bodies around us, and is thus debarred from knowing more than the *outsides* of things; (2) that its typical achievement is therefore geometry, and geometry, *because it can measure only straight lines*, necessarily misconceives the true character of 'real duration'. Now, as to the first point, I should have thought it obvious that the establishment of a *modus vivendi* with one's fellows has always been as much of a practical need as the avoidance of stones and pit-falls, and the alleged conclusion about the defects of the intellect does not therefore seem to me to follow from M. Bergson's premisses, even if we had any reason, as I do not see that we have, to accept the premisses. And as to the second point, I would ask whether M. Bergson possesses a clock or a watch, and if he has, how he supposes time is measured on them? He seems to me to have forgotten the elementary fact that angles can be measured as well as straight lines. (I might add that he makes the further curious assumption that all geometry is metrical.) It may be that something would be left of the Bergsonian philosophy if one eliminated the consequences of these initial blunders, but I do not know what the remainder would be. At any rate, the anti-intellectualism which M. Bergson and his disciple, Professor Carr, seem to regard as fundamental will have to go, unless different and better grounds can be found for it. I must leave it to others to judge of the adequacy of this apology.

FOR REFERENCE

Varisco, *The Great Problem* (Macmillan).
Varisco, *Know Thyself* (Macmillan).
Aliotta, *The Idealistic Reaction against Science* (Macmillan).
Bertrand Russell, *Our Knowledge of the External World* (Open Court Publishing Co.).
Bertrand Russell, *The Problems of Philosophy* (Home University Library).
A. N. Whitehead, *The Principles of Natural Knowledge* (Cambridge Press).
G. E. Moore, *Ethics* (H.U.L.).
W. McDougall, *Philosophy* (H.U.L.).
A. N. Whitehead, *Introduction to Mathematics* (H.U.L.).

# III

# RECENT DEVELOPMENTS IN EUROPEAN THOUGHT ON THE EVOLUTION OF RELIGION

F. B. Jevons

The living beings that exist or have existed upon the earth are of kinds innumerable ; and, in the opinion of man, the chief of them all is mankind. Man, for the simple reason that he is man, is anthropomorphic in all his judgements and not merely in his religious conceptions ; he holds himself to be the standard and measure in all things. If his right so to regard himself were challenged, if he were called upon to justify himself for having taken his foot as a unit of measurement, or his fingers as the basis of his system of numbers, he might reply that anything will serve as a standard for weights and measures, provided that it never varies, but is always the same whenever referred to. But the reply, valid though it is, does not do full justice to man : it leaves room for the suspicion that a standard is something chosen by man in a purely arbitrary manner and without reference to the facts of nature. If that were really the case, then man's conception of himself as superior to the other animals on earth might be but a prejudice of an arbitrary kind. When, however, we consider, from the point of view of evolution, the place of man among the other animals that occupy or have occupied the earth, it is indubitable that the human organism is in point of time the latest evolved and the

human brain is in point of complexity and efficiency the most highly developed. Further, the evidence of embryology goes to show that the organism which has eventually become human became so only by passing through successive stages, each of which has its analogue in some of the existing forms of animal life. Those forms of animal life exist side by side ; and if we conceive them to be represented diagrammatically by vertical lines, differing in height according to their degree of evolution, the line representing the human organism will be the tallest, and may be considered to have become the tallest by successive increments or stages corresponding to the height of the various other parallel vertical lines.

When the conception of evolution, which had been employed to explain the origin of species and the descent of man, and which had been gained by a consideration of material organisms, came to be applied to the world of man's thoughts, to the non-material and spiritual domain, and to be used for the purpose of explaining the growth and the development of religion, it was natural that the conception which had proved so valuable in the one case should be applied without modification to the other—as natural as that the first railway coach should be built on the model of the stage-coach. The possibility that the theory of evolution might itself evolve, and in evolving change, was one that was not, and at that time could hardly be, present to the minds of those who were extending the theory and in the process of extending it were developing it. Yet the possibility was there, implicit in the very conception of evolution, which involves continuous change—change in continuity and continuity in change.

Any and every attempt to trace the evolution of religion seems at first necessarily to involve the assumption that from the beginning religion was there to be evolved.

That was the position assumed by Robertson Smith in *The Religion of the Semites*, which appeared in 1889. At that date the aborigines of Australia were supposed to represent the human race in its lowest and its earliest stage of development. In them, therefore, if anywhere, we might expect to find what would be religion in its lowest and earliest stage indeed but still religion. Reduced to its lowest terms, religion, it was felt at first, must imply at least belief in a god and communion with him. If, therefore, religion was to be found amongst the representatives of the lowest and earliest stage in the evolution of humanity, belief in a god and communion with him must there be found. He who seeks finds. Robertson Smith found amongst the Australians totem-gods and sacramental rites. Indeed, it was at that time the belief universally held by students of the science of religion that in Australia a totem was a god and a god might be a totem. It was conjectured by Robertson Smith that in Australia the totem animal or plant was eaten sacramentally. Since, then, the totem in Australia was held to be both the god and the animal or plant in which the god manifested himself, it followed that in Australia we had, preserved to this day, the earliest form of sacrifice—that in which the totem animal was itself the totem god to whom it was offered as a sacrifice, and was itself—or rather himself—the sacramental meal furnished to his worshippers. The totem was eaten, it was conjectured, with the object of acquiring the qualities of the divine creature, or of absorbing them into the person of the worshipper. That the totem was eaten sacramentally rested, as has just been said, on the conjecture made by Robertson Smith in 1889; but in 1899 Dr. (now Sir James) Frazer declared that, thanks to the investigations of Messrs. Spencer and Gillen, 'here, in the heart of Australia, among the most primitive

savages known to us, we find the actual observance of that totem sacrament which Robertson Smith, with the intuition of genius, divined years ago, but of which positive examples have hitherto been wanting.'

On the foundation thus laid by the intuition of Robertson Smith and approved in 1899 by Sir James Frazer, a simple and complete theory of the evolution of religion was possible. In any one tribe there were several totem-kins. The totem of each kin was divine, but the personality of a totem was so undeveloped in conception that, though it might, and on the theory did, develop into a deity, it was originally more of the nature of a spirit than a god, and totemism proper might easily pass into polydaemonism, that is a system in which the beings worshipped were conceived to possess a personality more clearly defined than that attributed to totems but less developed than that assigned to deities. From the beginning each tribe had worshipped a plurality of totems; it was, therefore, readily intelligible that, as these totems came to be credited with more and more definite and developed personality, the plurality of totems became not only a polydaemonism, but afterwards a plurality of deities, and a system of polytheism came to be established. From polytheism then, amongst the Israelites, monotheism was conceived to have been gradually developed.

On this theory the evolution of religion was, if we may so describe it, linear or rectilinear: the process consisted in a series of successive stages. In some cases, as for instance among the aborigines of Australia, it never rose higher than its starting-point, totemism; in others, as for instance in Samoa, it became polytheism without ceasing to be totemism; in others again, as for instance amongst the Aryan peoples, it became so completely polytheistic that even conjecture can discover but few

indications or 'survivals' of the totemism from which it is supposed to have developed; and the polytheism of the Israelites was so completely superseded by monotheism that the very existence of an earlier stage of polytheism could be as strenuously denied in their case as the pre-existence of totemism could be denied amongst the polytheistic Aryans. Nevertheless the theory was that if we represent the growth of the various religions of the world diagrammatically by vertical lines parallel to one another but of various lengths, one line standing for totemism, a longer line for polydaemonism, a still longer one for polytheism, and the longest of all for monotheism, we should see that the line of growth has been the same in all cases, and that it is in their length, or (shall we say?) in their height alone that the various lines differ, and that the longest line culminates in monotheism only because it has been, so to speak, pulled out in the same way that a telescope when closed, may be extended. The evolution of religion on this view has been a process literally of 'evolution' or unfolding: the idea of a god and of communion with him has been present from the beginning; and, much though religion may have changed, it remains to the end essentially the same thing. This view of the process of religious evolution we may fairly term 'the pre-formation theory'; for on this theory each stage is pre-formed in the stage immediately preceding it, and in the earliest stage of all were all succeeding stages contained pre-formed, though it depended on circumstances whether the seed should spring up, and how many stages of its growth it should accomplish.

Robertson Smith's theory of the evolution of religion is in effect a form of the pre-formation theory, and is liable to the same difficulties as dog the theory of pre-formation in all its applications. On the theory, if we

cut open a seed we should find within it the plant pre-formed; if we analyse totemism, the seed from which, in Robertson Smith's view, all other forms of religion have grown in orderly succession one after the other, we find in it religion in all its stages pre-formed. In fact, however, if we cut open an acorn we do not find a miniature oak-tree inside. The presumption, therefore, is that neither in totemism, if we dissect it, shall we find religion pre-formed. Indeed, there is the possibility that totemism, on dissection, will be found to have no such content—that the hope or expectation of finding anything in it is as vain, is as much doomed to disappointment, as is the expectation of the child who cuts open his drum, thinking to find inside it something which produces the sound.

It was, however, not on *a priori* grounds like these that Sir James Frazer was led eventually to combat and deny the existence, 'in the heart of Australia, amongst the most primitive savages known to us' of 'that totem sacrament which', in 1899 he declared, 'Robertson Smith, with the intuition of genius' had divined years before it was actually observed. It was by the evidence of new facts, discovered by Messrs. Spencer and Gillen, that Sir James Frazer was compelled to abandon Robertson Smith's theory of the evolution of religion. Robertson Smith had seen, or had thought he saw, amongst the Australians sacramental rites and the worship of totem gods. Sir James Frazer is now compelled by the evidence of the facts to hold that in what he calls 'pure totemism', i. e., in totemism as we find it in Australia, 'there is nothing that can properly be described as worship of the totems. Sacrifices are not presented to them, nor prayers offered, nor temples built, nor priests appointed to minister to them. In a word, totems pure and simple are never gods, but

merely species of natural objects, united by certain intimate and mystic ties to groups of men.' It seems, therefore, according to Frazer, that in totemism, when dissected, there is no religion, just as in the child's drum, when cut open, there is—nothing. Yet, we may reflect, on the battle-field from a drum proceeds a great and glorious sound, inspiring men to noble deeds. Whereas *ex nihilo nil fit:* from nothing naturally nothing comes. If, however, something does come, it is not from nothing that it comes. Amongst the most primitive savages known to us, men are united to their totems, as Frazer admits, by ' certain intimate and mystic ties '.

What then is it in totemism from which, on Sir James Frazer's view, something comes? We might, perhaps, have expected that it was from the ' mystic ' bond uniting man with the world which is not only around him but of which he is part, and in which he lives and moves and has his being. To say so, however, would be to admit that in totemism there was something not only ' mystic ' but potentially religious. And Sir James Frazer does not follow that line of thought, so dangerous in his view. On the contrary, he maintains that ' the aspect of the totemic system, which we have hitherto been accustomed to describe as religious, deserves rather to be called magical '. The totem rites which Robertson Smith had interpreted as being sacramental and as being intended as a means of communion with the totem-gods Sir James Frazer regards as merely magical: ' totemism,' he says, ' is merely an organized system of magic intended to secure a supply of food.'

We may remark, in passing, that if totemism is ' mere ' magic, there is indeed (as Sir James holds) no worship in totemism, but in that case in totemism there can be no such ' intimate and mystic ties ' between the totem and the totem-kin as Sir James at first maintained there was.

But be that as it may, according to Sir James Frazer, 'in the heart of Australia, amongst the most primitive savages known to us,' we find totemism; and totemism on examination proves to be 'merely an organized system of magic'. If now we start by assuming these premisses, or by granting these postulates for the sake of argument, we can, indeed, erect on them a theory of the evolution of religion. But if we so start, we must do as Sir James Frazer did in the first edition of *The Golden Bough*: we must hold that religion is but a developed form of magic. *En route* it may have changed considerably in appearance, but in fact and fundamentally it remains the same thing. In all the lower forms of religion, and in most of the higher, there are practices which are by common consent and beyond doubt magical. This indisputable fact lends colour to the view that religion was in its origin nothing but magic, and that religion is, to those who can see the facts as they are, nothing but magic to this day: the magician was but a priest, and the priest, claiming superhuman power, is but a magician still. Prayers were at first but spells, and even now are supposed, by simple repetition, to produce their effects.

If against this view it be objected that one of the most constant facts in the history of all religions, from the lowest to the highest, is that religion has at all times carried on war against sorcery, witchcraft, and magic, that in the lowest stages of man's evolution witches have been 'smelt out' by the witch-finder, and that in the higher stages of civilization witches have been persecuted, tortured, and burnt, the reply made to the objection is that the war against witchcraft and magic is due simply to the jealousy and resentment which regular practitioners of any art, e.g., medicine, have ever displayed and do still display towards irregular, unprofessional practitioners. This reply, however, is now generally admitted to be

one which it is impossible to accept in the case of religion for the simple reason that it does not account for the facts. The plain fact which wrecks this attempted explanation is that magic is punished and witches are burnt not because witch-finders or priests are jealous of them, but because the community dreads them and feels their very existence to be a danger. It is the community which feels the world of difference there is between magic and religion.

The attraction of the view that religion is but magic under another name, that prayers are to the end but spells, that 'priest' is but 'magician' written differently, is that it is a simplicist theory. It simplifies things. It exhibits religion as evolved out of magic and as containing at the end nothing more or other than was present at the beginning in magic. It is but a variant of the pre-formation theory of the evolution of religion. In fine, the notion that in magic we have religion pre-formed is the counterpart of the idea that we can find religion pre-formed in totemism. In both cases we secure continuity in the process of evolution apparently, but the continuity secured is appearance merely and is gained only at the price of ignoring the facts.

It is not surprising, therefore, that in the later, enlarged editions of *The Golden Bough*, Sir James Frazer has given up the view that religion evolved out of magic, being moved thereto by the fact, as he says, that there is 'a fundamental distinction and even opposition of principle between magic and religion'. There is, in Frazer's present view, no continuity between the magic which came first and the religion which came ages later: between them is an absolute breach of continuity, a fundamental distinction, an opposition of principle. 'The principles of thought on which magic is based,' Frazer says, 'resolve themselves into two: first, that

like produces like; and, second, that things which have once been in contact with each other continue to act on each other.' These beliefs are due to the association of ideas: if two things are more or less like one another, or if two things have gone together in our experience of the past, the sight of the one will make us think of the other and expect to find it. So strong is the expectation which is thus created that in the savage it amounts to absolute belief; and magic consists in acting on that belief, in setting like to produce like, with the firm conviction that thus (by magic) man can obtain all that he desires. For long ages, according to Frazer, man acted on that belief, and only eventually did he discover that magic did not always act. This discovery set him thinking and led him to the inference that at work in the world there must be supernatural powers or beings, that the course of nature and of human life is controlled by personal beings superior to man. And that inference, according to Sir James Frazer's definition, constitutes religion.

The fundamental distinction, then, and even opposition of principle between magic and religion, is that in the one case man thinks that he can gain all that he desires by means of magic, and that in the other he turns with offerings and supplication to the personal beings superior to man whom he imagines to control the course of nature and of human life.

Whether the distinction which Sir James Frazer draws between magic and religion will hold depends partly on whether his definitions of magic and religion are acceptable. In his account of magic there at least appears to be some confusion of thought. On the one hand, he says, 'it must always be remembered that every single profession and claim put forward by the magician, as such, is false; not one of them can be maintained without

deception, conscious or unconscious.' This pronouncement makes it easy for us to understand that even the savage would eventually find magic an unsatisfactory method of gratifying his desires, a deception in fact. On the other hand, Sir James apparently contradicts himself, that is to say, he denies that every single profession or claim put forward by the magician is false, and says, 'however justly we may reject the extravagant pretensions of magicians and condemn the deceptions which they have practised on mankind, the original institution of this class of man has, take it all in all, been productive of incalculable good to humanity.' The ground for this second pronouncement, so contradictory of the first, is that magicians, Sir James tells us, 'were the direct predecessors, not merely of our physicians and surgeons but of our investigators and discoverers in every branch of natural science.' Thus, though he no longer regards priests as transmogrified magicians, he does regard magicians as the earliest men of science, and does regard science, therefore, as a highly developed stage of magic. This view logically follows from the premisses from which it starts; and if it is felt to be unacceptable, we shall naturally be inclined to scrutinize the premisses once more and more carefully. When we do so scrutinize them, we see that the principles of thought on which Sir James Frazer assumes magic to be based are in effect the principles from which science started: they are the beliefs that like produces like—the basis of the law of causation—and that things which our experience shows to have gone together in the past tend always to go together—which is one way of stating our belief in the uniformity of nature. If then these principles of thought are the principles on which magic as well as science is based, then science and magic are the same thing, and we have only to choose whether

we will say that magic is not magic but undeveloped science, or that science is not science but merely magic transmogrified. Thus, the pre-formation theory once more reasserts itself: magic is the seed in which science is prefigured or pre-formed.

If we wish to escape from this conclusion, if we wish to maintain the validity of science and yet always to remember 'that every single profession and claim put forward by the magician, as such, is false—not one of them can be maintained without deception, conscious or unconscious', we must consider whether Sir James Frazer's account of magic, according to which the principles of magic are identical with those of science, is the only account that can be given of magic; and for that purpose we may contrast it with the view of Wilhelm Wundt. But before doing so, since Sir James Frazer holds that there is 'a fundamental distinction and even opposition of principle between magic and religion', it will be well to try to see not only what he means by magic, but also whether his description or definition of religion is acceptable.

Whereas Robertson Smith held that religion, reduced to its very lowest terms, must imply at least belief in a god and communion with him, Frazer considers religion to be the belief that the course of nature and of human life is controlled by personal beings superior to man. By the one view stress is laid on the mystic side of religion, on the communion which is effected through sacrifice; by the other view stress is laid on the power which the gods may be induced by prayer and supplication to exercise for the benefit of man. Our first reflection, therefore, is that any view of religion, to be comprehensive, cannot confine itself to either of these aspects singly, but must find room for both—for both prayer and sacrifice. They cannot be mutually exclusive, nor can

they be simply juxtaposed, as though they were atoms unrelated to one another, accidental neighbours in the same district. There must be a higher unity, not created by or subsequent to the coalescence of elements originally independent of each other, but a higher unity of which both prayer and sacrifice are manifestations. This higher unity, I venture to suggest, is the first principle of religion ; and, if it is not explicitly recognized as the first principle of religion either by Robertson Smith or by Frazer, that may well be because their attention is concentrated on the earlier stages in the evolution of religion, when as yet it is not conspicuous and is, therefore, though in fact operative, liable to be overlooked. As Ferrier has said, ' first principles of every kind have their influence, and indeed operate largely and powerfully long before they come to the surface of human thought and are articulately expounded.' What then is the first principle of religion which only after long ages of evolution rose to the surface of human thought, and which, though it had been operative largely and powerfully, came only in the slow course of human evolution to be articulately expounded ? The first principle of religion is love—love of one's neighbour and one's God.

In the light of that first principle it is manifest that prayer and sacrifice are not fundamentally unrelated and accidentally juxtaposed : a sacrifice accompanied not even by unspoken prayer, prompted by no desire, no wish for anything whatever, is a meaningless concept. Equally unmeaning and unintelligible is the idea of a prayer which involves no sacrifice—whether by sacrifice we understand the offering of gifts or the sacrifice of self. But perhaps it may be said that, even though love alone can lead to sacrifice of self, still it is undeniable that prayers may be put up and sacrifices be offered by a man for the sake of what he is going to get by doing so ; and

that that is what Sir James Frazer means when he sees in religion the belief that beings superior to man may be induced by prayer so to order things that man may get his heart's desire. Then, indeed, we get a continuity of evolution, a continuity between magic and religion, which Frazer perhaps did not intend wholly to deny: that is to say the continuous thread running through both magic and religion and uniting them is desire. Desire is continuous, though the means of gratifying it change. In one stage of evolution magic is the means; in another, religion. But throughout we find the process of evolution to be continuous—change in continuity and continuity in change.

Now it is indeed undeniable that prayer and sacrifice may be made by a man for the sake of what he is going to get, and may from the beginning have been made, partly at least, from that motive. But if evolution in one of its aspects is change, then one of the changes brought about by evolution in religion is precisely that prayer and sacrifice come to be regarded as no longer a means whereby a man can get his desires accomplished—his will done—but as the indispensable condition for doing God's will. Prayer then becomes communion with God, and the sacrifice of self the living exhibition of love—the first principle of religion, the principle which manifests itself now in prayer and now in sacrifice.

From this point of view, then, Sir James Frazer's account of religion will be considered unacceptable: it makes religion and magic alike but means whereby man has—vainly—sought to satisfy desire. And the implication is that the day of both alike is over. But if Frazer's account of religion is unacceptable, his account of magic also is open to criticism. He wavers between two opinions about magic: at one time he regards it as all falsehood and deception, at another as the source from which science

springs, just as at one time he considered magic fundamentally the same as religion and then again as fundamentally different from religion. When Frazer is bent upon identifying magic and science, he attributes to primitive man a theory of causation (that like produces like): magic is based, he says, upon 'the views of natural causation embraced by the savage magician'. On the other hand, according to Wilhelm Wundt in his *Völkerpsychologie*, primitive man has no notion whatever of natural causation: primitive man, Wundt says, has only one way of accounting for events—if something happens, somebody did it. If any one mysteriously falls ill and dies, the question at once presents itself to the savage mind, who did it? How any one could contrive to make the man fall ill and die is, to the man's relations, thoroughly and disquietingly mysterious. The one thing clear to them is that somebody possesses and has exercised this mysterious and horrible power. The person who, in the opinion not only of the relatives but also of all or most of the community, naturally would do this sort of thing differs in some way—in his appearance or habits—from the average member of the community, and accordingly is credited, or discredited, with this mysterious and dreadful power. Such a person, according to Wundt, is a magician. Such an event is a marvel: so long as it is supposed to be brought about by a man, it is a piece of magic; when it is ascribed (as, according to Wundt, it comes in later, though not in primitive times, to be ascribed) to a god, it is a miracle.

If science then does not work magic, there must be a fundamental distinction between science and magic, an absolute opposition of principles. The principles of thought on which magic is based cannot be, as Frazer maintains, the same as those which give to science its validity. In fine, the belief in magic seems to be based

not on any principle of thought, but upon the assumption that, if something happens, somebody must have done it, and therefore must have had the power to do it.

Wundt, whilst differing from Frazer in his description of magic, is at one with him in believing that before religion existed there was an age of magic. But Wundt's view that marvels are magic when supposed to have been done by man, but miracles when supposed to have been done by a god or his priests, suggests the possibility that, as the belief in magic is found usually, if not always, to exist side by side with the belief in miracles, the two beliefs may from the beginning have co-existed, that the age of magic is not prior in the course of evolution to the age of religion. This possibility, it will be admitted, derives some colour at least from the way in which the theory of evolution is employed to account for the origin of species: different though reptiles are from birds, the serpent from the dove, both are descended from a common ancestor, the archaeopteryx. If this instance be taken as typical of the process of evolution in general, then the course of evolution is not, so to speak, linear or rectilinear, but—to use M. Bergson's word—' dispersive '. To suppose that religion is descended from magic would then be as erroneous as to suppose that birds are descended from reptiles or man from the monkey. The true view will be that the course of evolution is not linear, is not a line produced for ever in the same direction, not a succession of stages, but is ' dispersive ', that from a common starting point many lines of evolution radiate in different directions. The course of evolution is not unilinear but multilinear; it runs on many lines which diverge, but all the diverging lines start from the same point.

If we apply this conception of evolution in general to the evolution of religion in particular—and Bergson, I should say, does not—then the centre of dispersion,

common to all religions, is the heart of man. The forms of religion evolving, emanating and radiating from that common centre are, let us say, fetishism, polytheism, and monotheism. If we wish to avoid, in the theory of religious evolution, an error analogous to that of supposing birds to be descended from reptiles, we must decline to suppose that monotheism is simply polytheism evolved, or that polytheism is descended from fetishism. We must consider that each of these three forms of religion is terminal, in the sense that no one of them leads on to, or passes into, either of the other two. All three forms of religious life may, and indeed do, exist side by side with one another, just as the countless forms of physical life may be found existing side by side. The foraminifera exist now, as they existed millions of years ago ; but the fact that they co-exist with higher forms of physical life does not show that the higher forms of life are but foraminifera in a more highly evolved form. Similarly, the fact that fetishism exists side by side with polytheism, or polytheism with monotheism, does not show that one is but a higher form of another : we must consider each to be a terminal form, as incapable of producing another, as it is impossible to conceive that the serpent develops into the dove.

The common centre and starting-point of fetishism, polytheism, and monotheism on this view (the ' dispersive' view) of the evolution of religion lies in the heart of man, in a consciousness, originally vague in the extreme, of the personality and superiority to man of the being or object worshipped. In all these three forms of religion there is worship, and in all three forms the being worshipped is personal. Further, a special tie is felt to exist between the worshipper and the personality worshipped : religion is the bond of union between them, and it is also a bond which unites the worshippers to one another. It is by

its very nature a bond of union, a means of communion between persons, human and divine. That is the mystic aspect of religion which finds expression in the rite of sacrifice and in the sacramental meals which are felt somehow to bind together, or rather to reunite and keep together, the worshippers and their god. This communion however is not merely mystic: it has its practical effects inasmuch as it affects the conduct of the worshipper and enables him to do what without it he would not have had strength to do.

If fetishism, polytheism, and monotheism radiate from a common centre, the heart of man, then the heart of man must also be regarded as the starting-point of magic. If they spring straight from the heart, though in different directions, dispersively, then magic must also start from the common centre; and, though its divergence from religion tends to become total, at first, and indeed it may be for long, the discrepancy between them is rather felt uneasily than recognized clearly. Categories, such as those of cause and effect, identity and difference, which are the common property of civilized thought, and which among us, Mr. L. T. Hobhouse says, 'every child soon comes to distinguish in practice, are for primitive thought interwoven in wild confusion.' Two categories, which in primitive thought are thus interwoven in wild confusion, are, it may be suggested, religion and magic; and only in the dispersive process of evolution do they tend to become discriminated. In ancient Egypt, in Babylon, in Brahminism, religion fails to disentangle itself from magic; and not even has Christianity always succeeded in throwing it off. Different as we may conceive magic and religion to be, the fact remains that at first they grow up intertwined together. In the lower forms of religion magic is worked not only by magicians but by priests as well; spells and prayers are hardly to be

distinguished from one another. The idea that 'priest' is but 'magician' writ differently, that prayers are but spells under another name, is now obsolete. The truth may be that religion neither follows on, nor is evolved from magic, but that both radiate from a common centre, the heart of man; and that at first both are attempts made by man to secure the fulfilment of his desires, to do his will, though eventually he finds that the way to control nature is to obey her, not to try to command her by working magic; and that it is in endeavouring to do God's will, not his own, that man finds peace at the last.

In the three forms of religion which thus far we have taken into account, fetishism, polytheism, monotheism, religion is felt to be a personal relation—a relation between the human personality and some personality more than human; and the human heart is reaching out and groping after some divine personality, if peradventure it may find Him. But there is yet another form of religion proceeding from the human heart in which this does not seem to be the case—and that is Buddhism. The Buddha definitely renounced the search after God and would not allow his disciples to engage in the pursuit. Practically the pursuit was useless, according to the Buddha: escape from suffering is all that man can want or strive or hope for. Escape from suffering is possible only by cessation from existence; and that cessation from existence, here and hereafter, can be attained by man himself, who can reach Nirvana without the aid of gods, if gods there be. From the point of view of metaphysics the idea that there is any relation between the human personality and the divine falls to the ground, according to the Buddha, because, whether there be gods or not, at any rate there is no human personality. As in a conflagration—and according to the Buddha the whole world, burning with desire, is in a state of conflagration—the flames leap from

one house that is burning to the next, so in its transmigrations the self, or rather the character, *Karman*, like a flame, leaps from one form of existence to another. The flame indeed appears to be there all the time the fire is burning; but the flame has no permanence, it is changing all the time the process of combustion is going on; and 'I' have no more permanence than the flame. 'I' only appear to be there as long as the process of life goes on. And as the flame only continues so long as there is something for it to feed on, so the process of transmigration or re-birth continues only so long as the thirst for being continues: the escape from re-birth is conditional on the extinction of that thirst or desire; and the disciple who has succeeded in putting off lust and desire has attained to deliverance from death and re-birth, has attained to rest, to Nirvana.

Thus, on the 'dispersive' view of the evolution of religion, Buddhism is a radiation from the common centre, from the heart of man, though it radiates in a direction very different from that followed by any other religion. The direction is indeed one which, as the history of religion shows, it has been impossible for man long to follow, for, wherever Buddhism has been established, it has relapsed; and the Buddha, who strove to divert man from prayer and from the worship of gods, has himself become a god to whom prayer and worship are addressed. Whether in the future the direction may be pursued more permanently than it has been by Buddhism up to now lies with the future to show.

Buddhism, however, on the 'dispersive' view of the evolution of religion, is not the only radiation from the common centre, of which we have to take account, in addition to fetishism, polytheism, and monotheism. From the human heart also proceeds 'the religion of humanity', the Positivist Church. Here, as originally

in Buddhism, the conception of a divine personality plays no part; but here the human personality, the very existence of which is denied by the Buddha, is raised to a high, indeed to the highest, level. There is no such thing as an individual, if by 'individual' is meant a man existing solely by himself, for a man can neither come into existence nor continue in existence by himself alone. It is an essential part of the conception of personality that it includes fellowship: a person to be a person must stand in some relation to other persons. They are presented to him, the subject, as objects of his awareness; and he, the subject, is also an object of their awareness. Humanity is thus a complex, in which alone persons are found and apart from which they have in fact no existence. Humanity thus plays in Positivism, as a religion, the part of 'the great Being', *le grand Être*, which in other religions is fulfilled by God, but with this difference, that humanity is human always and never divine.

The ruler of a country steers the ship of state, but he is a pilot only metaphorically. Whether the terms worship and prayer are used more than metaphorically by the Positivist seems hard to decide. On the one hand, if it is felt that worship and prayer are indispensable to religion, it may be argued that in religions other than Positivism they prove not only on analysis, but in the course of history, to be, as by Positivism they are recognized to be, of purely subjective import. On the other hand, it may be that they provide merely a means of transition from the religions of the past to the religion of the future.

Another matter of interest is the place of morality in Positivism as a religion. According to M. Alfred Loisy in his book *La Religion*, morality and religion are bound up together. They cannot exist apart from one another: they might, he says, 'be dissociated in fact and thought,

were it not that they are inseparable in the life of humanity.' And in his view morality is summed up in the idea of duty. He says, 'in the beginning was duty, and duty was in humanity, and duty was humanity. Duty was at the beginning in humanity. By it all things were made, and without it nothing was made.' Thus, where duty is, there also is religion. Not only, according to Loisy, has that always been so in every stage through which the evolution of religion has passed, but it will also be the case with the religion of the future. Thus the conception of evolution which Loisy holds is the same as that entertained by Robertson Smith, the difference being that, whereas on the one view the idea of God and of communion with Him has been present from the beginning, and, much though it may have changed, it remains to the end the same thing; on the other view it is the idea of duty—the duty which is humanity—that was in the beginning and will continue to the end. Both views are applications of the 'pre-formation' theory of evolution.

But Positivism perhaps is not necessarily tied to the 'pre-formation' theory. It seems equally capable of being fitted in to the 'dispersive' theory, and of being regarded as an emanation or radiation proceeding direct from the human heart. It may be so regarded, if we consider the essence of it to be found not in the concept of duty, which seems to imply the existence of some superior who imposes duties on man, but in that love of one's fellow-man which, to be love, must be given freely, and simply because one loves. The sense of obligation, the feeling of duty, obedience to the commandments of authority and to the prohibitions which the community both enforces and obeys, are, all of them, various expressions of the primitive feeling of taboo—a feeling of alarm and fear. If we confine our attention

to this set of facts, we may say, with M. Loisy, 'in the beginning was duty, and duty was in humanity'. We may however hesitate to follow him when he goes on to say, 'by duty all things were made, and without it nothing was made'. We may hesitate and the Positivist may hesitate, because, primitive though the feeling of fear may be, the feeling of love is equally original: on it and in it the family and society have their base and their origin; and to it they owe not only their origin but their continuance. Love however is not a matter of duty and obedience; it is not subject to commandment or prohibition; nor does it strive by commands or authority to enforce itself. In the process by which duty—legal and moral obligation—evolves out of the primitive feeling of taboo, love is not implicated: love springs from its own source, the human heart, and runs its own course. Taboo may have existed from the beginning; but to the end, whatever its form—duty, obligation, obedience to authority—it remains in character what it was at first, prohibitive, negative. Love alone is creative: without it 'was not anything made that was made'.

There seems, therefore, no necessity to regard the 'preformation' theory of evolution, rather than the 'dispersive' theory, as essential to Positivism.

Common to all the views about the evolution of religion that have been mentioned in this paper is the belief that, the more religion changes, the more it remains the same thing. If identified with duty, then duty it was in the beginning, and duty it will remain to the end. For those who conceive it to be merely magic, magic it was and magic it remains. Those who define it as belief in a god and communion with him find that belief in the earliest as well as the latest stages. All would agree in rejecting Bergson's view of evolution—that in evolution there is change, but nothing which changes. All would agree that

in the evolution of religion there is something which, change though it may, remains the same thing, and that is religion itself. But on the question what religion is, there is no agreement : no definition of religion as yet—and there have been many attempts to define it—has gained general acceptance. We may even surmise, and admit, that no attempt ever will be successful. Such admission, indeed, may at first to some seem equivalent to admitting that religion is a nullity, and the admission may accordingly be welcomed or rejected. But a moment's reflection will show that the admission has no such consequence. None of our simple feelings can be defined : pleasure and pain can neither be defined ; nor, when experienced, doubted. And some of our general terms, those at any rate which are ultimate, are beyond our power either to define or doubt : no one imagines that 'life' can be defined, but no one doubts its existence. And religion both as a term and as a fact of experience is ultimate, and, because ultimate, incapable of definition. It is not to be defined but only to be felt. It is an affair not merely of the intellect, but still more of the heart.

In what sense, then, can we speak of the evolution of religion ? Evolution implies change ; and no one doubts that there have been changes in religion. No one can imagine that it has from the beginning till now remained identically the same. What seems conceivable is that throughout there has been, not identity but continuity—change indeed in continuity but also continuity in change. The child 'learns to speak the words and think the ideas, to reproduce the mode of thought, as he does the form of speech' of the community into which he is born. In the speech, thought, and feelings—even in the religious feelings—of the community, from generation to generation, there is continuity, but not identity. From generation to generation they are not identical but are continuously

changing ; and they change because each child who takes them over reproduces them ; and, in reproducing them, changes them, not much in most cases, but very considerably in the case of men of genius and the great religious reformers. The heart is the treasure-house in which not only old things are stored, but from which also new things are brought forth. The process of evolution implies indeed that the old things, though not everlasting, persist for a time ; but it also implies the manifestation of that which, though continuous with the old, is at the same time new. It is from the heart of man, of some one man, that what is new proceeds : the community it is which is conservative of the old. The heart of man, or man himself, exhibits both change in continuity and continuity in change.

The acorn, the sapling, and the oak are different stages of one continuous process. But it is the same tree throughout the whole process. So, too, perhaps it may be said, religion is a term which includes or is applicable to all stages in the one process, and not to the stage of monotheism alone, or of polytheism alone, or even to those stages alone in which there is a reference to personal beings. Each of these stages is a stage in the process of religion but no stage is by itself the whole process. But this view of the evolution of religion regards religion as though it were an organism, self-subsistent, existing and evolving as independently of man as the oak-tree does ; whereas in truth religion has no such independent existence or evolution. It is not from polytheism that monotheism proceeds ; nor does polytheism proceed from fetishism : it is from the heart of man that they and all other forms of religion emanate and radiate. To conceive fetishism, polytheism, and monotheism as three successive stages in one process, to represent the evolution of religion by a straight line marked off into

three parts, or any other number of parts, is to forget that they do not produce one another but that each emanates from the heart of man. The fact that they emanate in temporal succession does not prove that one springs from the other.

Nor can we say that values—religious or aesthetic—are to be determined on the simple principle that the latest edition is the best. To say that an *editio princeps* has value only for the bibliophile is to admit that all values are personal, as are all thoughts and all feelings, all goodness and all love.

### For Reference

Robertson Smith, *The Religion of the Semites* (A. & C. Black, 1889).

J. G. Frazer, *The Golden Bough* (Macmillan & Co., 1890–1915).

Grant Allen, *The Evolution of the Idea of God* (Grant Richards, 1897).

H. Bergson, *L'Évolution créatrice* (F. Alcan, 1908).

F. B. Jevons, *The Idea of God in Early Religions* (1910), and *Comparative Religion* (1913) (Cambridge University Press).

G. F. Moore, *History of Religions* (T. & T. Clark, 1914).

A. Loisy, *La Religion* (E. Nourry, 1917).

# IV

# RECENT TENDENCIES IN EUROPEAN POETRY

## WITH OCCASIONAL REFERENCES TO THE NOVEL, DRAMA, AND CRITICISM

PROFESSOR C. H. HERFORD

WHEN Matthew Arnold declared that every age receives its best interpretation in its poetry, he was making a remark hardly conceivable before the century in which it was made. Poetry in the nineteenth century was, on the whole, more charged with meaning, more rooted in the stuff of humanity and the heart of nature, less a mere province of *belles-lettres* than ever before. Consciously or unconsciously it reflected the main currents in the mentality of European man, and the reflection was often most clear where it was least conscious. Two of these main currents are :

(1) The vast and steady enlargement of our knowledge of the compass, the history, the potencies, of Man, Nature, the World.

(2) The growth in our sense of the *worth* of every part of existence.

Certain aspects of these two processes are popularly known as ' the advance of science ', and ' the growth of democracy '. But how far ' science ' reaches beyond the laboratory and the philosopher's study, and ' democracy ' beyond political freedom and the ballot-box, is precisely what poetry compels us to understand ; and not least the poetry of the last sixty years with which we are to-day concerned.

How then does the history of poetry in Europe during these sixty years stand in relation to these underlying processes? On the surface, at least, it hardly resembles growth at all. In France above all—the literary focus of Europe, and its sensitive thermometer—the movement of poetry has been, on the surface, a succession of pronounced and even fanatical schools, each born in reaction from its precursor, and succumbing to the triumph of its successor. Yet a deeper scrutiny will perceive that these warring artists were, in fact, groups of successive discoverers, who each added something to the resources and the scope of poetry, and also retained and silently adopted the discoveries of the past; while the general line of advance is in the direction marked by the two main currents I have described. Nowhere else is the succession of phases so sharp and clear as in France. But since France does reflect more sensitively than any other country the movement of the mind of Europe, and since her own mind has, more than that of any other country, radiated ideas and fashions out over the rest of Europe, these phases are in fact traceable also, with all kinds of local and national variations, in Italy and Spain, Germany and England, and I propose to take this fact as the basis of our present very summary and diagrammatic view. The three phases of the sixty years are roughly divided by the years 1880 and 1900.

The first, most clearly seen in the French Parnassians, is in close, if unconscious, sympathy with the temper of science. Poetry, brought to the limit of expressive power, is used to express, with the utmost veracity, precision, and impersonal self-suppression, the beauty and the tragedy of the world. It sought Hellenic lucidity and Hellenic calm—in the example most familiar to us, the Stoic calm and 'sad lucidity' of Matthew Arnold.

The second best seen in the French Symbolists, was

directly hostile to science. But they repelled its confident analysis of material reality in the name of a part of reality which it ignored or denied, an immaterial world which they mystically apprehended, which eluded direct description, frustrated rhetoric, and was only to be come at by the magical suggestion of colour, music, and symbol. It is most familiar to us in the 'Celtic' verse of Mr. Yeats and 'A. E.'.

The third, still about us, and too various and incomplete for final definition, is in closer sympathy with science, but, in great part, only because science has itself found accommodation between nature and spirit, a new ideality born of, and growing out of, the real. If the first found Beauty, the end of art, in the plastic repose of sculpture, and the second in the mysterious cadences of music, the poetry of the twentieth century finds its ideal in life, in the creative evolution of being, even in the mere things, the 'prosaic' pariahs of previous poetry, on which our shaping wills are wreaked. We know it in poets unlike one another but yet more unlike their predecessors, from D'Annunzio and Dehmel and Claudel to our Georgian experimenters in the poetry of paradox and adventure.

## I. Poetic Naturalism

The third quarter of the nineteenth century opened, in western Europe, with a decided set-back for those who lived on dreams, and a corresponding complacency among those who throve on facts. The political and social revolution which swept the continent in 1848 and 1849, and found ominous echoes here, was everywhere, for the time, defeated. The discoveries of science in the third and fourth decades, resting on calculation and experiment, were investing it with the formidable prestige which it has never since lost; and both metaphysics and theology reeled perceptibly under the blows delivered in its name.

The world exhibition of 1851 seemed to announce an age of settled prosperity, peace, and progress.

In literature the counterpart of these phenomena was the revolt from *Romanticism*, a movement, in its origins, of poetic liberation and discovery, which had rejuvenated poetry in Germany and Italy, and yet more signally in England and in France, but was now petering out in emotional incoherence, deified impulse, and irresponsible caprice.

The revolt accordingly everywhere sought to bring literature into closer conformity with reality; with reality as interpreted by science; and to make art severe and precise. In the novel, Flaubert founded modern naturalism with his enthralling picture of dull provincials, *Mme Bovary* (1857); two years later George Eliot tilted openly in *Adam Bede* against the romancers who put you off with marvellous pictures of dragons, but could not draw the real horses and cattle before their eyes.[1]

Realism, at once more unflinching and more profoundly poetic, and yet penetrated, especially in Tolstoy and Dostoievsky, with an intensity of moral conviction beside which the ethical fervour of George Eliot seems an ineffectual fire, was one of the roots of the Russian Novel; which also reached its climax in the third quarter of the century. But though it concurred with analogous movements in the West, it drew little of moment from them; even Turgenjev, a greater Maupassant in artistry, drew his inner inspiration from wholly alien springs of Slavonic passion and thought. And it was chiefly through them that the Russian novel later helped to nourish the radically alien movement of Symbolism in France.

[1] The temper of the two realists was no doubt widely different. 'C'est en haine du réalisme', wrote Flaubert, 'que j'ai entrepris ce roman. Mais je n'en déteste pas moins la fausse idéalité, dont nous sommes bercés par le temps qui court' (*Corresp.* 3, 67).

In drama, Ibsen broke away from the Romantic tradition of his country with the iconoclastic energy of one who had spent his own unripe youth in offering it a half-reluctant homage. The man of actuality in him denounced the drama built upon the legends of the Scandinavian past—the mark for him of a people of dreamers oblivious of the calls of the hour. On the morrow of the disastrous (and for Norway in his view ignominious) Danish war of 1864, his scorn rang out with prophetic intensity in the fierce tirade of *Brand*. Happily for his art, revolt against romance in him was united, more signally than in more than two or three of his contemporaries, with the power of seizing and presenting contemporary life. 'Realism' certainly expresses inadequately enough the genius of an art like his, enormously alive rather than fundamentally like life, and no less charged with purpose and idea than the work of the great Russians, though under cover of reticences and irony little known to them. The great series of prose dramas—from 1867 (*The League of Youth*) onwards—with their experimental prelude *Love's Comedy* (1863)—were to be for all Europe the most considerable literary event of the fourth quarter of the century, and they generated affiliated schools throughout the West. They did not indeed themselves remain untouched by the general intellectual currents of the time, and it will be noticed below that the later plays (from *The Lady of the Sea* onward) betray affinities, like the Russian novel, with what is here called the second phase of the European movement.

In Criticism, the showy generalizations of Villemain gave place to Sainte-Beuve's series of essays towards a 'natural history of minds' [1] and Taine's more sweeping attempt to explain literature by environment.[2] Among

[1] *Causeries du Lundi*, 1850 f.

[2] *Histoire de la littérature anglaise*, 1863.

ourselves, Meredith's *Essay on Comedy* (1872) brilliantly restated Molière's dictum that the comic is founded on the real, and not on a fantastic distortion of it, while Matthew Arnold applied alike to literature and to theology a critical insight fertilized by his master Sainte-Beuve's delicate faculty for disengaging the native quality of minds from the incrustations of tradition and dogma.

In poetry the French Parnassians created the most brilliant poetry that has, since Milton, been built upon erudition and impeccable art. Their leader, Leconte de Lisle, in the preface of his *Poèmes antiques* (1853), scornfully dismissed Romanticism as a second-hand, incoherent, and hybrid art, compounded of German mysticism, reverie, and Byron's stormy egoism. Sully Prudhomme addressed a sterner criticism to the shade of Alfred de Musset—the Oscar Wilde of the later Romantics[1]—who had never known the stress of thought, and had filled his poetry with light love and laughter and voluptuous despairs; the new poets were to be no such gay triflers, but workers at a forge, beating the glowing metal into shape, and singing as they toiled.[2] Carducci, too, derisively contrasts the 'moonlight' of Romanticism—cold and infructuous beams, proper for Gothic ruins and graveyards—with the benignant and fertilizing sunshine he sought to restore; for him, too, the poet is no indolent caroller, and no gardener to grow fragrant flowers for ladies, but a forge-worker with muscles of steel.[3] Among us, as usual, the divergence is less sharply marked; but when Browning calls Byron a 'flat fish', and Arnold sees the poet of *Prometheus* appropriately pinnacled in the 'intense inane', they are expressing

[1] But a Wilde who wrote no *De Profundis* and no *Ballad of Reading Gaol*.

[2] *La Forge*: dedicated to Gaston Paris, the greatest *forgeron* of his generation in the love of Old French.

[3] *Rime Nuove*: Classicismo e Romantismo.

a kindred repugnance to a poetry wanting in intellectual substance and in clear-cut form.

If we turn from the negations of the anti-romantic revolt to consider what it actually sought and achieved in poetry, we find that its positive ideals, too, without being derived from science, reflect the temper of a scientific time. Thus the supreme gift of all the greater poets of this group was a superb vision of beauty, and of beauty—*pace* Hogarth—there is no science. But their view of beauty was partly limited, partly fertilized and enriched, by the sources they discovered and the conditions they imposed, and both the discoveries and the limitations added something to the traditions and resources of poetry. Thus :

(1) They exploited the aesthetic values to be had by knowledge. They pursued erudition and built their poetry upon erudition, not in the didactic way of the Augustans, but as a mine of poetic material and suggestion. Far more truly than Wordsworth's this poetry could claim to be the impassioned expression which is in the face of science ; for Wordsworth's knowledge is a mystic insight wholly estranged from erudition ; his celandine, his White Doe, belong to no fauna or flora. When Leconte de Lisle, on the other hand, paints the albatross of the southern sea or the condor of the Andes, the eye of a passionate explorer and observer has gone to the making of their exotic sublimity. The strange regions of humanity, too, newly disclosed by comparative religion and mythology, he explores with cosmopolitan impartiality and imaginative penetration ; carving, as in marble, the tragedy of Hjalmar's heart and Angentyr's sword, of Cain's doom, and Erinnyes never, like those of Aeschylus, appeased. The Romantics had loved to play with exotic suggestions ; but the East of Hugo's *Orientales* or Moore's *Lalla Rookh* is merely a veneer ; the poet of *Qain* has heard the wild asses cry and seen the Syrian sun descend into the golden foam.

In the three commanding poets of our English mid-century, learning becomes no less evidently poetry's honoured and indispensable ally. Tennyson studies nature like a naturalist, not like a mystic, and finds felicities of phrase poised, as it were, upon delicate observation. Man, too, in Browning, loses the vague aureole of Shelleyan humanity, and becomes the Italian of the Renascence or the Arab doctor or the German musician, all alive but in their habits as they lived, and fashioned in a brain fed, like no other, on the Book of the histories of Souls. Matthew Arnold more distinctively than either, and both for better and for worse, was the scholar-poet; among other things he was, with Heredia and Carducci, a master of the poetry of critical portraiture, which focusses in a few lines (*Sophocles, Rokel, Heine, Obermann Once More*) the meaning of a great career or of a complex age.

(2) In the elaboration of their vision of beauty from these enlarged sources, Leconte de Lisle and his followers demanded an impeccable artistry. 'A great poet', he said, 'and a flawless artist are convertible terms.' The Parnassian precision rested on the postulate that, with sufficient resources of vocabulary and phrase, everything can be adequately expressed, the analogue of the contemporary scientific conviction that, with sufficient resources of experiment and calculation, everything can be exhaustively explained. The pursuit of an objective calm, the repudiation of missionary ardour, of personal emotion, of the *cri du cœur*, of individual originality, involved the surrender of some of the glories of spontaneous song, but opened the way, for consummate artists such as these, to a profusion of undiscovered beauty, and to a peculiar grandeur not to be attained by the egoist. Leconte's temperament leads him to subjects which are already instinct with tragedy and thus in his hands assume this grandeur without effort. The power of sheer style to

ennoble is better seen in Sully Prudhomme's *tours de force* of philosophic poetry—when he unfolds his ideas upon 'Justice' or 'Happiness', for instance, under the form of a debate where masterly resources of phrase and image are compelled to the service of a rigorous logic; or in the brief cameo-like pieces on 'Memory', 'Habit', 'Forms', and similar unpromising abstractions, most nearly paralleled in English by the quatrains of Mr. William Watson. But the cameo comparison is still more aptly applied to the marvellously-chiselled sonnets of Heredia—monuments of a moment, as sculpture habitually is, but reaching out, as the finest sculpture does, to invisible horizons, and to the before and after—the old wooden guardian-god recalling his former career as a scarlet figure-head laughing at the laughter or fury of the waves; Antony seeing the flying ships of Actium mirrored in the traitorous azure of Cleopatra's eyes.

In Italy the ideal of an austere simplicity and reserve, resting as it did on the immense prestige of Leopardi, asserted itself even in the naturally exuberant and impetuous genius of Carducci. Without it we should not have had those reticences of an abounding nature, those economies of a spendthrift, which make him one of the first poets of the sonnet in the land of its origin, and one of the greatest writers of Odes among the 'barbarians'. With reason he declared in 1891, when most of his poetry had been written, that 'all the apparent contradictions in my work are resolved by the triple formula: in politics Italy before all, in aesthetics classical poetry before all, in practice, frankness and force before all'. His two chief disciples, D'Annunzio and Pascoli, antithetical in almost all points, may be said to have divided his inheritance in this; Pascoli's Vergilian economy contrasting with the exuberance of D'Annunzio somewhat as with us the classicism of the present poet-laureate with that of

Swinburne. In Germany the Parnassian reserve, concentration, and aristocratic exclusiveness was to reappear in the lyrical group of Stefan Georg.

(3) Finally, the Parnassian poetry, like most contemporary science, was in varying degrees detached from and hostile to religion, and found some of its most vibrating notes in contemplating its empty universe. Leconte de Lisle offers the Stoic the last mournful joy of 'a heart seven-times steeped in the divine nothingness',[1] or calls him to 'that city of silence, the sepulchre of the vanished gods, the human heart, seat of dreams, where eternally ferments and perishes the illusory universe'.[2] Here, too, Leopardi had anticipated him.

In the ebullient genius of Carducci and Swinburne this lofty disdain for theological illusions passes into the fierce derision of the Ode to Satan and the militant paganism of the Sonnet to Luther, and the *Hymn to Man*. In Matthew Arnold it became a half-wistful resignation, the pensive retrospect of the Greek 'thinking of his own gods beside a fallen runic stone', or listening to the 'melancholy long withdrawing roar' of the tide of faith 'down the vast edges drear and naked shingles of the world'; while in James Thomson resignation passed into the unrelieved pessimism of the *City of Dreadful Night*. In all these poets, what was of moment for poetry was not, of course, the anti-theological or anti-clerical sentiment which marks them all, but the notes of sombre and terrible beauty which the contemplation of the passing of the gods, and of man's faith in them, elicits from their art.

Yet the supreme figure, not only among those who share in the anti-Romantic reaction but among all the European poets of his time, was one who had in the heyday of youth led the Romantic vanguard—Victor Hugo. Leconte de Lisle never ceased to own him his

[1] *Midi.* [2] *La Paix des Dieux.*

master, and Hugo's genius had since his exile, in 1851, entered upon a phase in which a poetry such as the Parnassian sought—objective, reticent, impersonal, technically consummate—was at least one of the strings of his many-chorded lyre. Three magnificent works—the very crown and flower of Hugo's production—belong to this decade, 1850–60,—the *Châtiments*, *Contemplations*, and *Légende des Siècles*. I said advisedly, one string in his lyre. Objective reticence is certainly not the virtue of the terrible indictment of 'Napoleon the Little'. On the other hand, the greatest qualities of Parnassian poetry were exemplified in many splendid pieces of the other two works, together with a large benignity which their austere Stoicism rarely permits, and I shall take as illustration of the finest achievement of poetry in this whole first phase the closing stanzas of his famous *Booz Endormi* in the *Legénde*, whose beauty even translation cannot wholly disguise. Our decasyllable is substituted for the Alexandrine.[1]

'While thus he slumbered, Ruth, a Moabite,
Lay at the feet of Boaz, her breast bare,
Waiting, she knew not when, she knew not where,
The sudden mystery of wakening light.

Boaz knew not that there a woman lay,
Nor Ruth what God desired of her could tell;
Fresh rose the perfume of the asphodel,
And tender breathed the dusk on Galgala.

Nuptial, august, and solemn was the night,
Angels no doubt were passing on the wing,
For now and then there floated glimmering
As it might be an azure plume in flight.

The low breathing of Boaz mingled there
With the soft murmur of the mossy rills.
It was the month when earth is debonnaire;
The lilies were in flower upon the hills.

[1] For this and the other verse-translations the writer is responsible.

Night compassed Boaz' slumber and Ruth's dreams,
The sheep-bells vaguely tinkled far and near;
Infinite love breathed from the starry sphere;
'Twas the still hour when lions seek the streams.

Ur and Jerimedeth were all at rest;
The stars enamelled the blue vault of sky;
Amid those flowers of darkness in the west
The crescent shone; and with half open eye

Ruth wondered, moveless, in her veils concealed,
What heavenly reaper, when the day was done
And harvest gathered in, had idly thrown
That golden sickle on the starry field.'

## II. Dream and Symbol

The rise of French symbolism towards the end of the 'seventies was a symptom of a changed temper of thought and feeling traceable in some degree throughout civilized Europe. Roughly, it marked the passing of the confident and rather superficial security of the 'fifties into a vague unrest, a kind of troubled awe. As if existence altogether was a bigger, more mysterious, and intractable thing than was assumed, not so easily to be captured in the formulas of triumphant science, or mirrored and analysed by the most consummate literary art.

Political and social conditions contributed to the change. France stood on the morrow of a shattering catastrophe. The complacency of mid-Victorian England began to be disturbed by menaces from the workshops of industry. And it was precisely in triumphant Germany herself that revolutionary Socialism found, in Karl Marx, its first organizing mind and authoritative exponent. The millennium was not so near as it had seemed; the problems of society, instead of having been solved once for all, were only, it appeared, just coming into view.

In the secluded workshops of Thought, subtler changes were silently going on. The dazzling triumphs of physical

science, which had led poetry itself to emulate the marble impassivity of the scientific temper, were undiminished; but they were seen in a new perspective, their authority ceased to be exclusive, the focus of interest was slowly shifting from the physical to the psychical world. Lange, writing the history of *Materialism* in 1874, virtually performed its obsequies; and Tyndall's brilliant effort, in 1871, to equip primordial Matter with the 'promise and the potency' of mind, unconsciously confessed that its cause was lost. Psychology, after Fechner, steadily advanced in prestige and importance from the outlying circumference of the sciences to their very centre and core.

But it was not merely particular doctrines that lost ground; the scope and validity of scientific method itself began to be questioned. In the most varied fields of thought there set in that 'idealistic reaction against science' which has been described in one of the most penetrating books of our time. Most significant of all, science itself, in the person of Mach, and Pearson, has abandoned the claim to do more than provide descriptive formulas for phenomena the real nature of which is utterly beyond its power to discover.

Of this changed outlook the growth of Symbolism is the most significant literary expression. It was not confined to France, or to poetry. We know how the drama of Ibsen became charged with ulterior meanings as the fiery iconoclast passed into the poet of insoluble and ineluctable doubt. But by the French symbolists it was pursued as a creed, as a religion. If the dominant poetry of the third quarter of the century reflected the prestige of science, the dominant poetry of the fourth reflected the idealistic reactions against it, and Villiers de l'Ile Adam, its founder, came forward proclaiming that 'Science was bankrupt'. And so it might well seem to

him, the visionary mystic inhabiting, as he did, a world of strange beauty and invisible mystery which science could not unlock. The symbolists had not all an explicit philosophy; but they were all aware of potencies in the world or in themselves which language cannot articulately express, and which are yet more vitally real than the 'facts' which we can grasp and handle, and the 'respectable' people whom we can measure and reckon with. Sometimes these potencies are vaguely mysterious, an impalpable spirit speaking only by hints and tokens; sometimes they are felt as the pulsations of an intoxicating beauty, breaking forth in every flower, but which can only be possessed, not described; sometimes they are moods of the soul, beyond analysis, and yet full of wonder and beauty, visions half created, half perceived. Experiences like these might have been described, as far as description would go, by brilliant artificers like the Parnassians. Verlaine and Mallarmé did not discover, but they applied with new daring, the fact that an experience may be communicated by words which, instead of representing it, suggest it by their colour, their cadences, their rhythm, their verbal echoes and inchoate phrases. All the traditional artistry of French poetic speech was condemned as both inadequate and insincere. 'Take eloquence and wring her neck! Nothing but music and the nuance—all the rest is "Literature", mere writing—futile verbosity!' that was the famous watchword of Verlaine's creed.[1]

The strength of symbolism lay in this demand for a complete sincerity of utterance. Its revolt against science was at the same time a vindication of truth, an

[1] Even the 'music' was far removed from the simplicity of pure song. The song of these poets was an incantation. Nay, painting itself witnessed a corresponding revolt against the 'eloquence' of the pseudo-realists—the 'far away dirty reasonableness', as Manet dubbed it, which missed the essential vision by using the worn-down accepted phrases of the public.

effort to get nearer to reality both by shedding off the incrustations of habitual phrase and by calling into play the obscure affinities by which it can be magically evoked. In the subtleties of suggestion latent in sensations the symbolists were real discoverers. But the way had already been pointed in famous verses by Baudelaire :

'Earth is a Temple, from whose pillared mazes
Murmurs confused of living utterance rise ;
Therein Man thro' a forest of symbols paces,
That contemplate him with familiar eyes.

As prolonged echoes, wandering on and on,
At last in one far tenebrous depth unite,
Impalpable as darkness, and as light,
Scents, sounds, and colours meet in unison.'

There Baudelaire had touched a chord that was to sound loud and long ; for what else than this thought of all the senses meeting in union inspired the music drama of Wagner ?—only one of his points of kinship, as we shall see, with symbolism.

Thus the symbolists, in quest of reality, touched it only through the inner life. There they are, in their fashion, realists. 'A landscape', said Albert Samain, 'is a state of soul.' The landscape may be false, but the state of soul is veracious. What interests them in life is the image of life, not lucidly reflected but exquisitely transformed. Yet the vision of the world caught in that transforming mirror was not without strange revealing glimpses, invisible, like stars mirrored in a well, to the plain observer. They could hear the music of the spheres ; or in the language of Samain's sonnet

'Feel flowing through them, like a pouring wave,
The music-tide of universal Soul ;
Hear in their heart the beating pulse of heaven.'[1]

[1] *Au jardin de l'Infante : Veillée.*

In the earlier poetry of Maurice Maeterlinck, the inner life imposes a more jealous sway. The poet sits not before a transforming mirror, where the outer world is disguised, but in a closed chamber, where it is only dreamed of, and it fades into the incoherence and the irrelevance of a dream. But the chamber is, of rare beauty, and in its hushed and perfumed twilight, dramas of the spirit are being silently and almost imperceptibly enacted, more tragic than the loud passion and violence of the stage. He has written an essay on Silence,—silence that, like humility, holds for him a 'treasure' beyond the reach of eloquence or of pride; for it is the dwelling of our true self, the spiritual core of us, 'more profound and more boundless than the self of the passions or of pure reason.' And so there is less matter for drama in 'a captain who conquers in battle or a husband who avenges his honour than in an old man, seated in his arm-chair waiting patiently with his lamp beside him, giving unconscious ear to all the eternal laws that reign about his house, interpreting without comprehending, the silence of door and window, and the quivering voice of the light; submitting with bent head to the presence of his soul and his destiny.'

It is on this side that symbolism discloses its kinship with the Russian novel,—with the mystic quietism of Tolstoy and the religion of self-sacrifice in Dostoievsky; and its sharp antagonism to the Nietzschean gospel of daemonic will and ruthless self-assertion, just then being preached in Germany. The two faiths were both alive and both responded to deep though diverse needs of the time; but the immediate future, as we shall see, belonged to the second. They had their first resounding encounter when Nietzsche held up his once venerated master Wagner to scorn as the chief of 'decadents' because he had turned from the superhuman heroism of Siegfried

and the boundless passion of Tristram to glorify the mystic Catholicism of the Grail and the loveliness of the 'pure fool' Parzifal.

Outside France symbolism found eager response among young poets, but rather as a literary than as an ethical doctrine. In Germany Dehmel, the most powerful personality among her recent poets, began as a disciple of Verlaine; in Italy, D'Annunzio wove esoteric symbols into the texture of the more than Nietzschean supermanliness of his supermen and superwomen. More significant than these, however, was the symbolism of what we call the Celtic school of poets in Ireland. For here both their artistic impressionism and their mystic spirituality found a congenial soil. The principal mediating force was Mr. Arthur Symons, friend of Verlaine and of Yeats, and himself the most penetrating interpreter of Symbolism, both as critic and as poet.[1] And to the French influence was added that of Blake, a poet too great to be included in any school, but allied to symbolism by his scorn for 'intellect' and for rhetoric, and by his audacities of figured speech. But Mr. Yeats and 'A. E.', the leaders of the 'Celtic' group, are in no sense derivation voices. They had the great advantage over the French of a living native folklore and faery lore. Hence their symbolism, no less subtle, and no less steeped in poetic imagining, has not the same air of literary artifice, of studio fabrication, of cultured Bohemianism; it breathes of the old Irish hills, holy with old-world rites, and the haunted woods, and the magical twilight and dewy dawns. And beneath all the folklore, and animating it, is the passion for Ireland

[1] To some types of Irish imagination French Naturalism, it is true, was no less congenial; hence the rift between the realist and the spiritual Irishmen delightfully played on in Max Beerbaum's cartoon of Yeats presenting the *Faery Queene* to George Moore.

herself, the mother, deathless and ever young, whom neither the desolation of the time nor the decay of hope can touch :

'Out-worn heart in a time out-worn
Come clear of the nets of wrong and right ;
Laugh, heart, again in the grey twilight ;
Sigh, heart, again in the dew of the morn.

Your mother Eire is always young,
Dew ever shining and twilight grey ;
Tho' hope fall from you and love decay
Burning in fires of a slanderous tongue.

Come, heart, where hill is heaped upon hill ;
For there the mystical brotherhood
Of sun and moon and hollow and wood
And river and stream work out their will.'

For that, the French had only the Fauns of a literary neo-classicism. The passion for France was yet indeed to find a voice in poetry. But this was reserved for the more trumpet-tongued tones of the contemporary phase to which I now turn.

## III. 'Creative Evolution'.

### 1. *Philosophic Analogies*

Nothing is more symptomatic of the incipient twentieth century than the drawing together of currents of thought and action before remote or hostile. The Parnassians were an exclusive sect, the symbolists an eccentric and often disreputable coterie ; Claudel, D'Annunzio, Rudyard Kipling, speak home to throngs of everyday readers, are even national idols, and our Georgians contrive to be bought and read without the least surrender of what is most poetic in their poetry. And the analogies between philosophic thinking and poetic creation become peculiarly striking. Merely to name Friedrich Nietzsche, Henri Bergson, and Benedetto Croce is to become vividly

aware of these analogies and of the common bent from which they spring. All three—whether with brilliant rhetoric, or iron logic, or a blend of both—use their thinking power to deride the theorizing intelligence in comparison with the creative intuition which culminates in poetry. To define the scope and province of this intuition is the purport of Croce's epoch-making *Aesthetics*, the basis and starting-point of his illumining work, in *Critica*, as a literary critic. Bergson is the dominant figure in a line of French thinkers possessed with the conviction that life, a perpetual streaming forth of creative energy, cannot be caught in the mechanism of law, adapted to merely physical phenomena, which at best merely gives us generalizations and lets the all-important particulars —the individual living thing—slip through the meshes; whereas intuition—the eye fixed on the object—penetrates to the very heart of this individual living thing, and only drops out the skeleton framework of abstract laws. Philosophy, in these thinkers, was deeply imbued with the analogies of artistic creation. 'Beauty,' said Ravaisson, 'and especially beauty in the most divine and perfect form, contains the secret of the world.'[1] And Bergson's *Creative Evolution* embodied a conception of life and of the world profoundly congenial to the artistic and poetic temper of his time. For he restated, it has been well said, the two great surviving formulas of the nineteenth century, evolution and the will to live, in terms precisely suited to the temper of the age just dawning. The will to live became a formula of hope and progress; evolution became a formula of vital impulse, of creative purpose, not of mechanical 'struggle for existence'.

The idea that aesthetic experience gives a profounder

[1] Aliotta, *The Idealistic Revolt*, p. 116. Cf. the account of the analogous views of Boutroux and Renouvier in the same chapter.

clue than logical thought to the inner meaning of things was as old as Plato. It was one of the crowning thoughts of Kant; it deeply coloured the metaphysics of Schelling. And Nietzsche developed it with brilliant audacity when in his *Birth of Tragedy* (1872) he contrasted scornfully with the laboured and ineffectual constructions of the theoretic man, even of Socrates the founder of philosophy, the radiant vision of the artist, the lucid clarity of Apollo. 'His book gave the lie to a thousand years of orderly development', wrote the great Hellenist Wilamowitz, Nietzsche's old schoolfellow, indignant at his rejection of the labours of scholastic reason. But it affirmed energetically the passion of his own time for immediate and first-hand experience.

And it did more. Beside and above Apollo, Nietzsche put Dionysus; beside vision and above it, *rage*. Of the union of these two Tragedy was born. And Nietzsche's glorification of this elemental creative force also responded to a wider movement in philosophy, here chiefly German. His Dionysiac rage is directly derived from that will in which Schopenhauer saw the master faculty of man and the hidden secret of the universe; and the beginning of Schopenhauer's fame, about 1850, coincides with a general rehabilitation of will as the dominant faculty in the soul and in the world, at the cost of the methodic orderly processes of understanding; a movement exhibited in the psychological innovations of Wundt and Münsterberg, in the growth of the doctrine that what a thing is is determined by what it *can*; that value is in fact the measure, and even the meaning, of existence; that will can arm impotence, create faith, and master disease; and in the call of the colossal will-power which created the German empire and launched her on the career of industrial greatness. Nietzsche's Superman is, above all, a being of colossal and masterful will, and

Zarathustra, the prophet of superhumanity, is only an incarnation of the will that for Schopenhauer moved the world. The moment at which the prestige of will began definitely to overcome that of reasoning is marked, as Aliotta has pointed out, by the appearance of James's *Will to Believe*, just when agnosticism seemed triumphant.

Nietzsche and Bergson thus, with all their obvious and immense divergences, concurred in this respect, important from our present point of view, that their influence tended to transfer authority from the philosophic reason to those 'irrational' elements of mind which reach their highest intensity in the vision and 'rage' of the poet. James's vindication of drunken exaltation as a source of religious insight was not the least symptomatic passage of his great book. And both concurred, however remote their methods or their speech, in conceiving reality as creation, creation in which we take part—a conception which again, in the hands of the constructive religious thinker, led directly to the type of faith announced in that last—the Jamesian—'Variety' of religious experience, which represents us as indispensable fellow-workers and allies of a growing and striving God.

### 2. *The New Freedom*

No reader of the poetry of our time can mistake the kinship of its prevailing temper with that which lies at the root of these philosophies. Without trying to fit its infinite variety to any finite formula, we may yet venture to find in it, as Mr. McDowall has found in our Georgian poetry in particular, a characteristic union of grip and detachment; of intense and eager grasp upon actuality as it breaks upon us in the successive moments of the stream of time, and yet an inner independence of it, a refusal to be obsessed by its sanctions and authorities, a tacit assumption that everything, by whatever length

of tradition consecrated, must come before the bar of the new century to be judged by its new mind. 'Youth is knocking at the door,' as it is said of Hilda in the symbolical *Master Builder*, and doubtless in every generation the philistines or Victorians in possession have had occasion to make that remark. The difference in our time is rather that youth comes in without knocking, and that instead of having to work slowly up to final dominance against the inertia of an established literary household, it has spontaneously, like Hilda Wangel, taken possession of the home, finding criticism boundlessly eulogistic, the public inexhaustibly responsive, and philosophy interpreting the universe, as we have seen, precisely in sympathy with its own naïve intuitions. No wonder that youth at twenty is writing its autobiography or having its biography written, and that at twenty-five it makes a show of laying down the pen, like Max Beerbohm, with the gesture of one rising sated from the feast of life: 'I shall write no more.'

The fact that youth finds itself thus at home in the world explains the difference in temper between the new poets of freedom and the old. The wild or wistful cry of Shelley for an ideal state emancipated from pain and death is as remote from their poetry as his spiritual anarchy from their politics; they can dream and see visions, in Scott's phrase, 'like any one going', but their feet are on the solid ground of actuality and citizenship, and the actuality comes into and colours their poetry no less than their vision. When Mr. Drinkwater looks out of his 'town window' he dreams of the crocus flaming gold in far-off Warwick woods; but he does not repudiate the drab inglorious street nor the tramway ringing and moaning over the cobbles, and they come into his verse. And I find it significant of the whole temper of the new poetry to ordinary life no less than that of ordinary men

and women to the new poetry, that he has won a singularly intimate relationship with a great industrial community. He has not fared like his carver in stone. But then the eagles of his carving, though capable of rising, like Shelley's, to the sun, are the Cromwells and Lincolns who themselves brought the eagle's valour and undimmed eye into the stress and turmoil of affairs.

No doubt a fiercer note of revolt may be heard at times in the poetry of contemporary France, and that precisely where devotion to some parts of the heritage of the past is most impassioned. The iconoclastic scorn of youth's idealism for the effeteness of the 'old hunkers', as Whitman called them, has rarely rung out more sharply than in the closing stanzas of Claudel's great Palm Sunday ode. All the pomp and splendour of bishops and cardinals is idle while victory yet is in suspense: that must be won by youth in arms.

'To-morrow the candles and the dais and the bishop with his clergy coped and gold embossed,
But to-day the shout like thunder of an equal, unofficered host
Who, led and kindled by the flag alone,
With one sole spirit swollen, and on one sole thought intent,
Are become one cry like the crash of walls shattered and gates rent:
'Hosanna unto David's son!'

Needless the haughty steeds marble-sculptured, or triumphal arches, or chariots and four,
Needless the flags and the caparisons, the moving pyramids and towers, and cars that thunder and roar,—
'Tis but an ass whereon sits Christ;
For to make an end of the nightmare built by the pedants and the pharisees,
To get home to reality across the gulf of mendacities,
The first she-ass he saw sufficed!

Eternal youth is master, the hideous gang of old men is
done with, we
Stand here like children, fanned by the breath of the
things to be,
But victory we will have to-day!
Afterwards the corn that like gold gives return, afterwards
the gold that like corn is faithful and will bear.
The fruit we have henceforth only to gather, the land we
have henceforth only to share,
But victory we will have to-day!'

In the same spirit Charles Péguy—like Claudel, be it noted, a student of Bergson at the École Normale—found his ideal in the great story of the young girl of Domremy who saved France when all the pomp and wisdom of generals had broken down. And in our own poetry has not Mr. Bottomley rewritten the Lear story, with the focus of power and interest transferred from the old king—left with not an inch of king in him—to a glorious young Artemis-Goneril?

But among our English Georgians this tense iconoclastic note is rare. Their detachment from what they repudiate is not fanatical or ascetic; it is conveyed less in invective than in paradox and irony; their temper is not that which flies to the wilderness and dresses in camel hair, but of mariners putting out to the unknown and bidding a not unfriendly good-bye at the shore. The temper of adventure is deeply ingrained in the new romance as in the old; the very word adventure is saturated with a sentiment very congenial to us both for better and worse; it quickens the hero in us and flatters the devil-may-care.

In its simplest form the temper of adventure has given us the profusion of pleasant verses which we know as the poetry of 'vagabondage' and 'the open road'. The point is too familiar to be dwelt on, and has been admirably illustrated and discussed by Mr. McDowall.

George Borrow, prince of vagabonds, Stevenson, the 'Ariel', with his 'Vagabond-song'—

> 'All I seek the heaven above,
> And the road below me',

and a few less vocal swallows, anticipated the more sustained flights and melodies of to-day, while Borrow's wonderful company of vagabond heroes and heroines is similarly premonitory of the alluring gipsies and circus-clowns of our Georgian poetry. Sometimes a traditional motive is creatively transformed; as when Father Time, the solemn shadow with admonitory hour-glass, appears in Mr. Hodgson's poem as an old gipsy pitching his caravan 'only a moment and off once again'.

Elsewhere a deeper note is sounded. It is not for nothing that Jeanne d'Arc is the saint of French Catholic democracy, or that Péguy, her poet, calls the Incarnation the 'sublime adventure of God's Son'. That last adventure of the Dantesque Ulysses beyond the sunset thrills us to-day more than the Odyssean tale of his triumphant home-return, and D'Annunzio, greatly daring, takes it as the symbol of his own adventurous life. Francis Thompson's most famous poem, too, represents the divine effort to save the erring soul under the image of the hound's eager chase of a quarry which may escape; while Yeats hears God 'blowing his lonely horn' along the moonlit faery glades of Erin. And Meredith, who so often profoundly voiced the spirit of the time in which only his ripe old age was passed, struck this note in his sublime verses on revolutionary France—

> 'soaring France
> That divinely shook the dead
> From living man; that stretched ahead
> Her resolute forefinger straight
> And marched toward the gloomy gate
> Of Earth's Untried.'

It is needless to dwell upon the affinity between this temper of adventure in poetry and the teaching of Bergson. That the link is not wholly fortuitous is shown by the interesting *Art Poétique* (1903) of his quondam pupil, Claudel, a little treatise pervaded by the idea of Creative-evolution.

It was natural in such a time to assume that any living art of poetry must itself be new, and in fact the years immediately before and after the turn of the century are crowded with announcements of 'new' movements in art of every kind. Beside Claudel's *Art Poétique* we have in England the *New Aestheticism* of Grant Allen; in Germany the 'new principle' in verse of Arno Holz. And here again the English innovators are distinguished by a good-humoured gaiety, if also by a slighter build of thought, from the French or Nietzschean 'revaluers'. Rupert Brooke delightfully parodies the exquisite hesitances and faltering half-tones of Pater's cloistral prose; and Mr. Chesterton pleasantly mocks at the set melancholy of the aggressive Decadence in which he himself grew up:

'Science announced nonentity, and art adored decay,
The world was old and ended, but you and I were gay.'

Like their predecessors in the earlier Romantic school, the new adventurers have notoriously experimented with poetic *form*. France, the home of the most rigid and meticulous metrical tradition, had already led the way in substituting for the strictly measured verse the more loosely organized harmonies of rhythmical prose, bound together, and indeed made recognizable as verse, in any sense, solely by the rhyme. With the Symbolists 'free verse' was an attempt to capture finer modulations of music than the rigid frame of metre allowed. With their successors it had rather the value of a plastic medium in which every variety of matter and of mood could be faithfully expressed. But whether called verse or not,

the vast rushing modulations of rhythmic music in the great pieces of Claudel and others have a magnificence not to be denied. And the less explicitly poetic form permits matter which would jar on the poetic instinct if conveyed through a metrical form to be taken up as it were in this larger and looser stride.

In Germany, on the other hand, the rhythmic emancipation of Whitman was carried out, in the school of Arno Holz, with a revolutionary audacity beyond the example even of Claudel. Holz states with great clearness and trenchancy what he calls his 'new principle of lyric'; one which 'abandons all verbal music as an aim, and is borne solely by a rhythm made vital by the thought struggling through it to expression'. Rhyme and strophe are given up, only rhythm remains.

Of our Georgian poetry, it must suffice to note that here, too, the temper of adventure in form is rife. But it shows itself, characteristically, less in revolutionary innovation than in attempts to elicit new and strange effects from traditional measures by deploying to the utmost, and in bold and extreme combinations, their traditional resources and variations, as in the blank verse of Mr. Abercrombie and Mr. Bottomley. This, and much beside in Georgian verse, has moods and moments of rare beauty. But, on the whole, verse-form is the region of poetic art in which Georgian poetry as a whole is least secure.

### 3. *The New Realism*

We see then how deeply rooted this new freedom is in the passion for actuality; not the dream but the waking and alert experience throbs and pulses in it. We have now to look more closely into this other aspect of it. Realism is a hard-worked term, but it may be taken to imply that the overflowing vitality of which poetry is one expression fastens with peculiar eagerness upon the

visible and tangible world about us and seeks to convey that zest in words. Our poets not only do not scorn the earth to lose themselves in the sky; they are positive friends of the matter-of-fact, and that not in spite of poetry, but for poetry's sake; and Pegasus flies more freely because 'things' are 'in the saddle' along with the poet.

That this matter-of-factness is loved by poets, for poetry's sake, marks it off once for all from the photographic or 'plain' realism of Crabbe. But it is also clearly distinct from the no less poetic realism of Wordsworth. Wordsworth's mind is conservative and traditional; his inspiration is static; he glorifies the primrose on the river brink by seeing its transience in the light of something far more deeply interfused which does not change nor pass away. Romance, in a high sense, lies about his greatest poetry. But it is a romance rooted in memory, not in hope—the 'glory of the grass and splendour of the flower' which he had seen in childhood and imaginatively re-created in maturity; a romance which change, and especially the intrusions of industrial man, dispelled and destroyed. Whereas the romance of our new realism rests, in good part, precisely in the sense that the *thing* so vividly gripped is not or need not be permanent, may turn into something else, has only a tenancy, not a freehold, in its conditions of space and time, a 'toss-up' hold upon existence, as it were, full of the zest of adventurous insecurity. A pessimistic philosophy would dissipate this romance, or strip it of all but the mournful poetry of doom. Mr. Chesterton glorifies the dust which may become a flower or a face, against the Reverend Peter Bell for whom dust is dust and no more, and Hamlet who only remembers that it once was Caesar. If our realism is buoyant, if it had at once the absorbed and the open mind, this is, in large part, in virtue of the temper which finds reality a perpetual creation. Every moment is precious

and significant, for it comes with the burden and meaning of something that has never completely been before; and goes by only to give place to another moment equally curious and new. This is the deeper ground of our present fashion of paradox; what Mr. Chesterton, its apostle, means when he says that 'the great romance is reality'; for paradox, the unexpected, is, in a reality so framed, the bare and sober truth. Hence the frequency, in our new poetry, of pieces founded deliberately upon, as Mr. McDowall points out, paradox: the breaking in of some utter surprise upon a humdrum society, as in Mr. de la Mare's *Three Jolly Farmers*, or Mr. Abercrombie's *End of the World*, or Mr. Munro's *Strange Meetings*.

Moreover, in this incessantly created reality we are ourselves incessantly creative. That may seem to follow as a matter of course; but it corresponds with the most radical of the distinctions between our realism and that of Wordsworth. When Mr. Wells tells us that his most comprehensive belief about the universe is that every part of it is ultimately important, he is not expressing a mystic pantheism which feels every part to be divine, but a generous pragmatism which holds that every part *works*. The idea of shaping and adapting will, of energy in industry, of mere routine practicality in office or household, is no longer tabooed, or shyly evaded; not because of any theoretic exaltation of labour or consecration of the commonplace, but because merely to use things, to make them fulfil our purposes, to bring them into touch with our activities, itself throws a kind of halo over even very humble and homely members of the 'divine democracy of things'. Rupert Brooke draws up a famous catalogue of the things of which he was a 'great lover'. He loved them, he says, simply *as being*. And no doubt, the simple sensations of colour, touch, or smell counted for much. But compare them with the things that

Keats, a yet greater lover of sensations, loved. You feel in Brooke's list that he liked doing things as well as feasting his passive senses; these 'plates', 'holes in the ground,' 'washen stones,' the cold graveness of iron, and so forth. One detects in the list the Brooke who, as a boy, went about with a book of poems in one hand and a cricket-ball in the other, and whose left hand well knew what his right hand did.[1] That takes us far from the dream of eternal beauty, which a Greek urn or a nightingale's song brought to Keats, and the fatal word 'forlorn', bringing back the light of common day, dispelled. The old ethical and aesthetic canons are submerged in a passion for life which finds a good beyond good and evil, and a beauty born of ugliness more vital than beauty's self. 'The worth of a drama is measured', said D'Annunzio, 'by its fullness of life', and the formula explains, if it does not justify, those tropical gardens, rank with the gross blooms of 'superhuman' eroticism and ferocity, to which he latterly gave that name. And we know how Maeterlinck has emerged from the mystic dreams and silences of his recluse chamber to unfold the dramatic pugnacities of Birds and Bees.

Even the downright foulness and ugliness which some people find so puzzling in poets with an acute delight in beauty, like Mr. Masefield, come into it not from any aesthetic obtuseness, but because these uglinesses are full of the zest of drama, of things being done or made, of life being lived. When Masefield sounded his challenge to the old aesthetics:

'Others may sing of the wine and the wealth and the mirth,
Mine be the dirt and the dross, the dust and scum of the earth',

[1] Keats, no doubt, also aspired to the life of action. But in him the two moods were disparate, even in conflict; in Brooke they were seemingly fused.

he knew well, as *The Everlasting Mercy* and *The Widow in the Bye Street* showed, that dirt and dross, if wrought into tragedy, can win a higher beauty than the harmonies of idyll. Even the hideous elder women in Mr. Bottomley's *Lear's Wife*, or his Regan—an ill-conditioned girl, sidling among the 'sweaty, half-clad cook-maids' after pig-killing, 'smeary and hot as they', participate in this beauty and energy of doing.

Poetry, in these cases, wins perhaps at most a Pyrrhic victory over reluctant matter. It is otherwise with the second of the great Belgian poets.

In the work of Verhaeren, the modern industrial city, with its spreading tentacles of devouring grime and squalor, its clanging factories, its teeming bazaars and warehouses, and all its thronging human population, is taken up triumphantly into poetry. Verhaeren is the poet of 'tumultuous forces', whether they appear in the roar and clash of 'that furnace we call existence', or in the heroic struggles of the Flemish nation for freedom. And he exhibits these surging forces in a style itself full of tumultuous power, Germanic rather than French in its violent and stormy splendour, and using the chartered licence of the French 'free verse' itself with more emphasis than subtlety.

### 4. *The Cult of Force*

In Verhaeren, indeed, we are conscious of passing into the presence of power more elemental and unrestrained than the civil refinement of our Georgians, at their wildest, allows us to suspect. The tragic and heroic history of his people, and their robust art, the art of Rembrandt, and of Teniers, vibrates in the Flemish poet. He has much of the temperament of Nietzsche, and if not evidently swayed by his ideas, or even aware of them, and with a generous faith in humanity which Nietzsche

never knew, he thinks and imagines with a kindred joy in violence:

'I love man and the world, and I adore the force
Which my force gives and takes from man and the universe.'

And it is no considerable step from him to the poets who in this third phase of our period have unequivocally exulted in power and burnt incense or offered sacrifice before the altar of the strong man. The joy in creation which, we saw, gives its romance to so much of the realism of our time, now appears accentuated in the fiercer romance of conflict and overthrow. Thanks largely to Nietzsche, this romance acquired the status of an authoritative philosophy—even, in his own country, that of an ethical orthodoxy.

The German people was doubtless less deeply and universally imbued with this faith than our war-prejudice assumes. But phenomena such as the enormous success of a cheap exposition of it, *Rembrandt als Erzieher* (1890) by a fervent Bismarckian, and of the comic journal *Simplicissimus* (founded 1895) devoted to systematic ridicule of the old-fashioned German virtues of tenderness and sympathy, indicated a current of formidable power and compass, which was soon to master all the other affluents of the national stream.

But older, and in part foreign, influences concurred to colour and qualify, while they sustained, the Nietzschean influence,—the daemonic power of Carlyle, the iron intensity and masterful reticence of Ibsen. This was the case especially, as is well known, in the drama. Gerhardt Hauptmann, who painted the tragedy of the self-emancipated superman,—as Mr. Shaw about the same time showed us his self-achieved apotheosis,—was no doubt the most commanding (as Mr. Shaw was the most original) figure in the European drama of the early century.

In poetry, the contributory forces were still more subtly mingled, and the Nietzschean spirit, which blows where it listeth, often touched men wholly alien from Nietzsche in cast of genius and sometimes stoutly hostile to him. Several of the most illustrious were not Germans at all. Among the younger men who resist, while they betray, his spell, is the most considerable lyric poet of the present generation in Germany. Richard Dehmel's vehement inspiration from the outset provoked comparison with Nietzsche, which he warmly resented.

He began, in fact, as a disciple of Verlaine, and we may detect in the unrestraint of his early erotics the example of the French poet's *fureur d'aimer*. But Dehmel's more strongly-built nature, and perhaps the downright vigour of the German language, broke through the tenuities of *la nuance*. It was not the subtle artistry of the Symbolists, but the ethical and intellectual force of the German character, which finally drew into a less anarchic channel the vehement energy of Dehmel. Nietzsche had imagined an ethic of superhuman will 'beyond good and evil'. The poet, replied Dehmel, had indeed to know the passion which transcends good and evil, but he had to know no less the good and evil themselves of the world in and by which common men live. And if he can cry with the egoism of lawless passion, in the *Erlösungen*, 'I will fathom all pleasure to the deepest depths of thirst, . . . Resign not pleasure, it waters power',—he can add, in the true spirit of Goethe and of the higher mind of Germany, 'Yet since it also makes slack, turn it into the stuff of duty!'

If Nietzsche provoked into antagonism the sounder elements in Dehmel, he was largely responsible for destroying such sanity as the amazing genius of Gabriele D'Annunzio had ever possessed. In D'Annunzio the sensuality of a Sybarite and the eroticism of a Faun go

along with a Roman tenacity and hardness of nerve. The author of novels which, with all their luxurious splendour, can only be called hothouses of morbid sentiment, has become the apostle of Italian imperialism, and more than any other single man provoked Italy to throw herself into the great adventure of the War. Unapproached in popularity by any other Italian man of letters, D'Annunzio discovered Nietzsche, and hailed him—a great concession—as an equal. When Nietzsche died, in 1900, D'Annunzio indicted a lofty memorial ode to the Titanic Barbarian who set up once more the serene gods of Hellas over the vast portals of the Future. Nietzsche indeed let loose all the Titan, and all consequently that was least Hellenic, in the fertile genius of the Italian ; his wonderful instinct for beauty, his inexhaustible resources of style are employed in creating orgies of superhuman valour, lust, and cruelty like some of his later dramas, and hymns intoxicated with the passion for Power, like the splendid Ode in which the City of the Seven Hills is prophetically seen once more the mistress of the world, loosing the knot of all the problems of humanity. His poetic autobiography, the first *Laude* (1901)—counterpart of Wordsworth's *Prelude* and its very antipodes—culminates in a prayer 900 lines long to Hermes, god of the energy which precipitates itself on life and makes it pregnant with invention and discovery, of the iron will ' which chews care as a laurel leaf '—the god of the Superman. And so he discovers the muse of the Superman, the Muse of Energy, a tenth Muse whose first poet he modestly disclaims to be, if he may only be, as he would have us interpret his name, her Announcer.

If D'Annunzio emulates Nietzsche, the two great militant poets of Catholic France would have scorned the comparison. Charles Péguy's brief career was shaped from his first entrance, poor and of peasant birth, at

a Paris Lycée, to his heroic death in the field, September 1914, by a daemonic force of character. His heroine, glorified in his first book, was Jeanne d'Arc, who attempted the impossible, and achieved it. In writing, his principle—shocking to French literary tradition—was to speak the brutal truth *brutalement*. As a poet he stood in the direct lineage of Corneille, whose *Polyeucte* he thought the greatest of the world's tragedies. As a man, he embodied with naïve intensity the unsurpassed inborn heroism of the French race.

Claudel, even more remote as a thinker from Nietzsche than Péguy, exhibits a kindred temper in the ingrained violence of his art. His stroke is vehement and peremptory; he is an absolutist in style as in creed. It is the style of one who apprehends the visible world with an intensity as of passionate embrace, such as the young Browning expresses in *Pauline*. 'I would fain have seen everything,' he cries, 'possessed and made it my own, not with eyes and senses only, but with mind and spirit.' And after he was converted he saw and painted supernatural things with the same carnal and robust incisiveness. The half-lights of Symbolist mysticism are remote from his hard glare. As a dramatist he drew upon and exaggerated that which in Aeschylus and Shakespeare seems to the countrymen of Racine nearest to the limit of the terrible and the brutal permissible in art: a princess nailed by the hands like a sparrow-hawk to a pine by a brutal peasant; the daughter of a noble house submitting to a loathed marriage with a foul-mouthed plebeian in order to save the pope.

And if we look, finally, for corresponding phenomena at home, we find them surely in the masculine, militant, and in the French sense *brutal* poetry of W. E. Henley and Rudyard Kipling. If any modern poets have conceived life in terms of will, and penetrated their verse

with that faith, it is the author of 'I am the Captain of my Soul', the 'Book of the Sword', and 'London Voluntaries', friend and subject of the great kindred-minded sculptor Rodin, the poet over whose grave in St. Paul's George Wyndham found the right word when he said—marking him off from the great contemplative, listening poets of the past—'His music was not the still sad music of humanity; it was never still, rarely sad, always intrepid.' And we know how Kipling, after sanctioning the mischievous superstition that 'East and West can never meet', refuted it by producing his own 'two strong men'.

## 5. *The New Idealism*

### (1) *Nationality*

We have now seen something of that power, at once of grip and of detachment with which the dominant poetry of this century faces what it thinks of as the adventure of experience, its plunge into the ever-moving and ever-changing stream of life. How then, it remains to ask, has it dealt with those ideal aspirations and beliefs which one may live intensely and ignore, which in one sense stand 'above the battle', but for which men have lived and died. With a generation which holds so lightly by tradition, which revises and revalues all accepted values, these aspirations and beliefs might well drop out of its poetry. On the other hand, these same aspirations and beliefs might overcome the indifference to tradition by ceasing to be merely traditional, by being immersed and steeped in that moving stream of life, and interwoven with the creative energies of men. The inherited faiths were put to this dilemma, either to become intimately alive and creative in poetry or to be of no concern for it. Some of them failed in the test. England has still devotees of

Protestantism, but Protestant religion has hardly inspired noble poetry since Milton. Nationality, on the other hand, has during the last century inspired finer poetry than at any time since the sixteenth, and that because it has been brought down from the region of political abstractions and ideologies into intimate union with heart and brain, imagination and sense. This is true also of Catholicism and of Socialism, and, if fitfully and uncertainly yet, of the ideal of international fraternity, of humanity. And to all these ideals, to all ideals, came finally the terrific, the overwhelming test of the War,—a searching, annihilating, purifying flame, in which some shrivelled away, some were stripped of the illusive glitter that concealed their mass of alloy, and some, purged of their baser constituents, shone out with a lustre unapproached before.

What is the distinctive note of this new poetry of nationality? And for the moment I speak of the years before the War. May we not say that in it the ideal of country is saturated with that imaginative grip of reality in all its concrete energy and vivacity which I have called the new realism? The nation is no abstraction, whether it be called Britannia, or *Deutschland über Alles*. It is seen, and felt; seen in its cities as well as in its mountains, in the workers who have made it, as well as in the heroes who have defended it; in its roaring forges as well as in its idyllic woodlands and its tales of battles long ago; and all these not as separate strands in a woven pattern, but as waters of different origin and hue pouring along together in the same great stream.

Émile Verhaeren, six years before the invasion, had seen and felt his country, living body and living soul, with an intensity which made it seem unimaginable that she should be permanently subdued. He well called his book *Toute la Flandre*, for all Flanders is there. Old Flanders,

—Artevelde and Charles Téméraire—whose soul was a forest of huge trees and dark thickets,

> 'A wilderness of crossing ways below,
> But eagles, over, soaring to the sun,'—

Van Eyck and Rubens—'a thunder of colossal memories'; then the great cities, with their belfries and their foundries, and their warehouses and laboratories, their antique customs and modern ambitions; and the rivers, the homely familiar Lys, where the women wash the whitest of linen, and the mighty Scheldt, the Escaut, the 'hero sombre, violent and magnificent', 'savage and beautiful Escaut', whose companionship had moulded and made the poet, whose rhythms had begotten his music and his best ideas.[1]

None of our English poets have rendered England in poetry with the same lyric intensity in its whole compass of time and space, calling up into light and music all her teeming centuries and peopled provinces. Yet the present generation has in some respects made a nearer approach to such achievement than its predecessors. A century of growing historic consciousness has not passed over us in vain; and if any generic distinction is to be found between our recent, often penetrating and beautiful, poetry of the English countryside and the Nature description of Wordsworth or of Ruskin, it is in the ground-tone of passion and memory that pervades it for England herself. Wordsworth wrote magnificently of England threatened with invasion, and magnificently of the Lake Country, Nature's beloved haunt. But the War sonnets and the Lake and

[1] Eighteenth-century observation, in the person of Goldsmith, had found no worthier epithet for the great Flemish river than 'lazy', and the modern tourist is likely to find this by far the more 'characteristic'. But which had the best chance of seeing truly, the life-long companion and lover, or the stranger, sad, lonely, and longing for home?

mountain poetry come from distinct strains in his genius, which our criticism may bring into relation, but our feeling insists on keeping apart. His Grasmere is a province of Nature—her favoured province—rather than of England; it is in the eye of Nature that the old Cumberland beggar lives and dies; England only provides the obnoxious workhouses to which these destitute vagrants were henceforth to be consigned. Is it not this that divides our modern local poetry from his? Mr. Belloc's Sussex is tenderly loved for itself; yet behind its great hills and its old-world harbours lies the half-mystic presence of historic England. And in Edward Thomas's wonderful old Wiltshireman, Lob, worthy I think to be named with the Cumberland Beggar,

> 'An old man's face, by life and weather cut
> And coloured,—rough, brown, sweet as any nut,—
> A land face, sea-blue eyed,'—

you read the whole lineage of sterling English yeomen and woodlanders from whom Lob springs.

This note is indeed relatively absent from the work of the venerable master who has made 'Wessex' the most vividly realized of all English provinces to-day, and whose prose Egdon Heath may well be put at the head of all the descriptive poetry of our time. But Mr. Hardy, in this respect, belongs to an earlier generation than that into which he happily survives.

Sometimes this feeling is given in a single intense concentrated touch. When Rupert Brooke tells us of

> 'Some corner of a foreign field
> That is for ever England. There shall be
> In that rich earth a richer dust concealed;
> A dust whom England bore, shaped, made aware,
> Gave, once, her flowers to love, her ways to roam,'

do we not feel that the solidarity of England with the English folk and of the English folk with the English soil,

is burnt into our imaginations in a new and distinctive way?

But the poetry of shires and provinces reacts too upon the poetry of nationality. It infuses something of the more instinctive and rudimentary attachments from which it springs into a passion peculiarly exposed to the contagion of rhetoric and interest. Some of the most strident voices among living nationalist poets have found an unexpected note of tenderness when they sang their home province. Mr. Kipling charms us when he tells, in his close-knit verse, of the 'wooded, dim, Blue goodness of the Weald'. And the more strident notes of D'Annunzio's patriotism are also assuaged by the tenderness and depth of his home feeling. We read with some apprehension his dedication of *La Nave* to the god of seas:

> 'O Lord, who bringest forth and dost efface
> The ocean-ruling Nations, race by race,
> It is this living People, by Thy grace
> Who on the sea
> Shall magnify Thy name, who on the sea
> Shall glorify Thy name, who on the sea
> With myrrh and blood shall sacrifice to Thee
> At the altar-prow,
> Of all earth's oceans make our sea, O Thou!
> Amen!

But he dedicated a noble drama, the *Figlia d'Iorio*, in a different tone, 'To the land of the Abruzzi, to my Mother, to my Sisters, to my brother in exile, to my father in his grave, to all my dead and all my race in the mountains and by the sea, I dedicate this song of the ancient blood.'

### (2) *Democracy*

The growth of democratic as of national feeling during the later century naturally produced a plentiful harvest of eloquent utterance in verse. With this, merely as such,

I am not here concerned, even though it be as fine as the Socialist songs of William Morris or Edward Carpenter. But the Catholic Socialism of Charles Péguy,—itself an original and, for most of his contemporaries, a bewildering combination—struck out a no less original poetry,—a poetry of solidarity. Péguy's Socialism, like his Catholicism, was single-souled; he ignored that behind the one was a Party, and behind the other a Church. It was his bitterest regret that a vast part of humanity was removed beyond the pale of fellowship by eternal damnation. It was his sublimest thought that the solidarity of man includes the damned. In his first version of the Jeanne d'Arc mystery, already referred to, he tells how Jesus, crucified,

> Saw not his Mother in tears at the cross-foot
> Below him, saw not Magdalen nor John,
> But wept, dying, only for Judas' death.
> The Saviour loved this Judas, and though utterly
> He gave himself, he knew he could not save him.

It was the dogma of damnation which for long kept Péguy out of its fold, that barbarous mixture of life and death, he called it, which no man will accept who has won the spirit of collective humanity. But he revolted not because he was tolerant of evil; on the contrary to damn sins was for him a weak and unsocial solution; evil had not to be damned but to be fought down. Whether this vision of Christ weeping because he could not save Judas was un-Christian, or more Christian than Christianity itself, we need not discuss here; but I am sure that the spirit of a Catholic democracy as transfigured in the mind of a great poet could not be more nobly rendered.

### (3) *Catholicism*

But Péguy's powerful personality set its own stamp upon whatever he believed, and though a close friend of Jaurès, he was a Socialist who rejected almost all the ideas

of the Socialist school. As little was his Catholicism to the mind of the Catholic authorities. And his Catholic poetry is sharply marked off from most of the poetry that burgeoned under the stimulus of the remarkable revival of Catholic ideas in twentieth-century France. I say of Catholic ideas, for sceptical poets like Rémy de Gourmont played delicately with the symbols of Catholic worship, made 'Litanies' of roses, and offered prayers to Jeanne d'Arc, walking dreamily in the procession of 'Women Saints of Paradise', to 'fill our hearts with anger'.[1] The Catholic adoration of women-saints is one of the springs of modern poetry. At the close of the century of Wordsworth and Shelley, the tender Nature-worship of Francis of Assisi contributed not less to the recovered power of Catholic ideas in poetry, and this chiefly in the person of two poets, in France and in England, both of whom played half-mystically with the symbolism of their names, Francis Thompson and Francis Jammes. The child-like naïvete of S. Francis is more delicately reflected in Jammes, a Catholic W. H. Davies, who casts the idyllic light of Biblical pastoral over modern farm life, and prays to 'his friends, the Asses' to go with him to Paradise, 'For there is no hell in the land of the Bon Dieu.'

But the most powerful creative imagination to-day in the service of Catholic ideas is certainly Paul Claudel. I pass by here the series of dramas, where a Catholic inspiration as fervent as Calderon's is enforced with Elizabethan technique and Elizabethan violence of terror, cruelty, and pity.[2] From the ferocious beauty of *L'Ôtage* turn rather to the intense spiritual hush before the altar of some great French church at noon, where the

[1] *Les Saintes du Paradis.*

[2] Cf. for instance the situation of Signe, in the grip of the brutal *préfet*, with that of Beatrice, in *The Changeling*, in the hands of De Flores.

poet, not long after the first decisive check of the invaders on the Marne, finds himself alone, before the shrine of Marie. Here too, his devotion finds a speech not borrowed from the devout or from their poetry :

'It is noon. I see the Church is open. I must enter.
Mother of Jesus Christ, I do not come to pray.

I have nothing to offer and nothing to ask.
I come only, Mother, to gaze at you.

To gaze at you, to weep for happiness, to know
That I am your son and that you are there.

Nothing at all but for a moment when all is still,
Noon! to be with you, Marie, in this place where you are.

To say nothing, to gaze upon your face,
To let the heart sing in its own speech.'

There the nationalist passion of Claudel animates his Catholic religion, yet does not break through its confines. But sometimes the strain of suffering and ruin is too intense for Christian submission, and he takes his God to task truculently for not doing his part in the contract ; we are his partner in running the world, and see, he is asleep !

'There is a great alliance, willy-nilly, between us henceforth, there is this bread that with no trembling hand
We have offered you, this wine that we have poured anew,
Our tears that you have gathered, our brothers that you share with us, leaving the seed in the earth.
There is this living sacrifice of which we satisfy each day's demand,
This chalice we have drunk with you !'

Yet the devout passion emerges again, with notes of piercing pathos :

'Lord, who hast promised us for one glass of water a boundless sea,
Who knows if Thou art not thirsty too ?

And that this blood, which is all we have, will quench that thirst in Thee,
We know, for Thou hast told us so.
If indeed there is a spring in us, well, that is what is to be shown,
If this wine of ours is red,
If our blood has virtue, as Thou sayest, how can it be known
Otherwise than by being shed ?'

### (4) *Effects of the War upon Poetry*

Thus could the great Catholic poet sing under pressure of the supreme national crisis of his country. Poetry at such times may become a great national instrument—a trumpet whence Milton or Wordsworth, Arndt or Whitman, blow soul-animating strains. The war of 1914 was for all the belligerent peoples far more than a stupendous military event. It shattered the patterns of our established mentality, and compelled us to seek new adjustments and support in the chaotically disorganized world. The psychical upheaval was most violent in the English-speaking peoples, where the military shock was least direct; for here a nation of civilians embraced suddenly the new and amazing experience of battle. Here too, the imaginatively sensitive minds who interpret life through poetry, and most of all the youngest and freshest among them, themselves shared in the glories and the throes of the fight as hardly one of the signers of our most stirring battle poetry had ever done before. How did this new and amazing experience react upon their poetry? This, our final question, is perhaps the crucial one in considering the tendencies of recent European poetry.

In the first place it enormously stimulated and quickened what was deepest and strongest in the energies and qualities which had been apparent in our latter day poetry before. They had sought to clasp life, to live,

not merely to contemplate, experience ; and here indeed was life, and death, and both to be embraced. Here was adventure indeed, but one whose grimness made romance cheap, so that in this war-poetry, for the first time in history, the romance and glamour of war, the pomp and circumstance of military convention, fall entirely away, and the bitterest scorn of these soldier-poets is bestowed not on the enemy, but on those contemplators who disguised its realities with the camouflage of the pulpit and the editorial arm-chair. Turn, I will not say from Campbell or from Tennyson, but from Rudyard Kipling or Sir H. Newbolt, to Siegfried Sassoon, and you feel that you have got away from a literary convention, whether conveyed in the manners of the barrack-room or of the public-school, to something intolerably true, and which holds the poet in so fierce a grip that his song is a cry.

But if the war has brought our poets face to face with intense kinds of real experience, which they have fearlessly grasped and rendered, its grim obsession has not made them cynical, or clogged the wings of their faith and their hope. I will not ask how the war has affected the idealism of others, whether it has left the nationalism of our press or the religion of our pulpits purer or more gross than it found them. But of our poetry at least the latter cannot be said. In Rupert Brooke the inspiration of the call obliterated the last trace of dilettante youth's pretensions, and he encountered darkness like a bride, and greeted the unseen death not with a cheer as a peril to be boldly faced, but as a great consummation, the supreme safety. How his poetry would have reacted to the actual experience of war we can only guess. But in others, his friends and comrades, the fierce immersion in the welter of ruin and pain and filth and horror and death brought only a more superb faith in the power of man's

soul to rise above the hideous obsession of his own devilries, to retain the vision of beauty through the riot of foul things, of love through the tumult of hatreds, of life through the infinity of death. True this was not a new power: poetry to be poetry must always in some measure possess it. What was individual to the poets was that this power of mastering actuality went along in them with the fierce and eager immersion in it; the thrill of breathing the

> 'calm and serene air
> Above the smoke and stir of this dim spot
> Which men call earth,'

with the thrill of seeing and painting in all its lurid colouring the volcanic chaos of this 'stir and smoke' itself. Thus the same Siegfried Sassoon who renders with so much close analytic psychology the moods that cross and fluctuate in the dying hospital patient, or the haunted fugitive, as he flounders among snags and stumps, to feel at last the strangling clasp of death, can as little as the visionary Shelley overcome the insurgent sense that these dead are for us yet alive, made one with Nature.

He visits the deserted home of his dead friend—

> 'Ah, but there was no need to call his name,
> He was beside me now, as swift as light . . .
> For now, he said, my spirit has more eyes
> Than heaven has stars, and they are lit by love.
> My body is the magic of the world,
> And dark and sunset flame with my spilt blood.'

And so the undying dead

> 'Wander in the dusk with chanting streams,
> And they are dawn-lit trees, with arms upflung,
> To hail the burning heaven they left unsung.'

Further, this war poetry, while reflecting military things with a veracity hardly known before, is yet rarely

militant. We must not look for explicit pacifist or international ideas; but as little do we find jingo patriotism or hymns of hate. The author of the German hymn of hate was a much better poet than anyone who tried an English hymn in the same key, and the English poets who could have equalled its form were above its spirit. Edith Cavell's dying words 'Patriotism is not enough' cannot perhaps be paralleled in these poets, but they are continually suggested. They do not say, in the phrase of the old cavalier poet, that we should love England less if we loved not something else more, or that something is wanting in our love for our country if we wrong humanity in its name. But the spirit which is embodied in these phrases breathes through them; heroism matters more to them than victory, and they know that death and sorrow and the love of kindred have no fatherland. They 'stand above the battle' as well as share in it, and they share in it without ceasing to stand above it. The German is the enemy, they never falter in that; and even death does not convert him into a friend. But for this enemy there is chivalry, and pity, and a gleam, now and then, of reconciling comradeship.

> 'He stood alone in some queer sunless place
> Where Armageddon ends,'—

the Englishman whom the Germans had killed in fight, to be themselves slain by his friend, the speaker. Their ghosts throng around him,—

> 'He stared at them, half wondering, and then
> They told him how I'd killed them for his sake,
> Those patient, stupid, sullen ghosts of men:
> At last he turned and smiled; smiled—all was well
> Because his face would lead them out of hell.'

Finally, the poet himself glories in his act; he knows that he can beat into music even the crashing discords

that fill his ears; he knows too that he has a music of his own which they cannot subdue or debase:

> 'I keep such music in my brain
> No din this side of death can quell,
> Glory exulting over pain,
> And beauty garlanded in hell.'

To have found and kept and interwoven these two musics—a language of unflinching veracity and one of equally unflinching hope and faith—is the achievement of our war-poetry. May we not say that the possession together of these two musics, of these two moods, springing as they do from the blended grip and idealism of the English character, warrants hope for the future of English poetry? For it is rooted in the greatest, and the most English, of the ways of poetic experience which have gone to the making of our poetic literature—the way, ultimately, of Shakespeare, and of Wordsworth. But that temper of catholic fraternity which finds the stuff of poetry everywhere does not easily attain the consummate technique in expression of a rarer English tradition, that of Milton, and Gray, and Keats. Beauty abounds in our later poets, but it is a beauty that flashes in broken lights, not the full-orbed radiance of a masterpiece. To enlarge the grasp of poetry over the field of reality, to apprehend it over a larger range, is not at once to find consummate expression for what is apprehended. The flawless perfection of the Parnassians—of Heredia's sonnets—is nowhere approached in the less aristocratically exclusive poetry of to-day. But the future, in poetry also, is with the spirit which found the aristocracy of noble art not upon exclusions, negations, and routine, but upon imagination, penetration, discovery, and catholic openness of mind.

### Some Books for Consultation

Pellissier, *Le Mouvement Littéraire au XIXme Siècle.*
Brunetière, *La Poésie Lyrique au XIXme Siècle.*
Eccles, F. Y., *A Century of French Poets.*
Vigié-Lecocq, *La Poésie Contemporaine.*
Phelps, *Advance of English Poetry in the Twentieth Century.*
Muret, *La Littérature Italienne d'aujourdhui.*
Ladenarde, *G. Carducci.*
Symons, *The Symbolist Movement in Literature.*
Jackson, *The Eighteen Nineties.*
McDowall, *Realism.*
Aliotta, *The Idealist Reaction against Science.*
Soergel, *Die deutsche Litteratur unserer Zeit.*
Bithell, *Contemporary German Poetry* (Translated).
Halévy, *Charles Péguy*

# V

# HISTORICAL RESEARCH

G. P. Gooch

The scientific study of history began a hundred years ago in the University of Berlin. Preparatory work of the highest importance had been accomplished by laborious collectors like Baronius and Muratori, keen-sighted critics such as Mabillon and Wolf, and brilliant narrators like Gibbon and Voltaire. But it was not till Niebuhr, Böckh, and above all Ranke preached and practised the critical use of authorities and documentary material that historical scholarship entered on the path which it has pursued with ever-increasing success for the last three generations. It is my task to-day to direct your attention to some of its main achievements during the last half-century.

The outstanding feature of our time has been the immense increase in the material available for the knowledge and interpretation of every stage and chapter in the life of humanity. Primitive civilization has been definitely brought within the circle of historical study. The discoveries of Boucher des Perthes, Pitt-Rivers, and their successors have thrown back the opening of the human drama tens if not hundreds of thousands of years, and we recreate prehistoric man from skull and weapon, language and legend. Anthropology has become a science, and the habits and beliefs of our savage ancestors have been rendered intelligible by the piercing insight of Tylor and Sir James Frazer. In its boundless erudition, its constructive imagination, and its wealth of suggestion, the *Golden Bough* stands forth as perhaps the

most notable contribution of the age to our knowledge of the evolution of the human race.

Among the most sensational events of the nineteenth century was the resurrection of the Ancient East. We now know that Greece and Rome, far from standing near the beginning of recorded history, were the heirs of a long series of civilizations. Our whole perspective has been changed or should be changed by the discovery. The ancient world thus revealed by the partnership of philology and archaeology ceases to be merely the vestibule to Christian Europe, and becomes in point of duration the larger part of human history.

The story opens with Champollion's decipherment of the bilingual tablet discovered more than a century ago at the Rosetta mouth of the Nile. The key once fitted to the lock, the whole civilization of ancient Egypt lay open to the explorer. A secure chronological basis was supplied by Lepsius, and systematic excavation was commenced by Mariette, who was named by the Khedive Director of Antiquities and established the Cairo Museum. The work of the three great founders of Egyptology has been carried forward during the last half-century by an international army of scholars. The interpretation of the ancient scripts has reached a technical mastery unknown to the pioneers, and the genius of Brugsch unlocked the door to demotic, which Champollion had never thoroughly mastered. But the triumphs of philology have been surpassed by the conquests of the spade. The closest friend of Mariette's later years was Maspero, who succeeded him as Director of Antiquities, and whose most sensational find was the tombs of the Kings near Thebes. Equally eminent as excavator, philologist, and historian, Maspero was the first to popularize Egyptology in France, as Flinders Petrie, the greatest excavator since Mariette, has popularized it in England. Until twenty years ago the curtain rose on the

pyramid-builders of the Fourth dynasty. We have now not only recovered the earlier dynasties, but neolithic and palaeolithic Egypt emerges from the primitive cemeteries. The immense accession of new material has enabled Eduard Meyer to construct something like a definite chronology; but though marvellous progress has been made in our knowledge of the Early, Middle, and New Empires, a great gap remains between the sixth and the eleventh dynasties, and the period of the Hyksos is still tantalizingly obscure. Egyptian history in the light of the latest discoveries may be best studied in the judicial pages of Breasted, the foremost of American Egyptologists.

The revelation of Assyrian civilization through Rawlinson's decipherment of cuneiform and the excavations of Botta and Layard in the middle of the nineteenth century was followed by a concerted attack on Babylonia. It was clear from the Nineveh tablets that most of the literary treasures of Assyria were merely copies of Babylonian originals; and when in 1877 de Sarzec, French Vice-Consul at Basra, bored into the mounds at Tello, the ancient Lagash, in Southern Babylonia, the most eager anticipations were surpassed. Texts had been found which Rawlinson pronounced to be pre-Semitic; but for the purpose of history the Sumerians were discovered at Tello. When de Sarzec died in 1901 he had opened a new chapter of history. The palaces of Sargon and Sennacherib, at which the world had marvelled in the 'forties, appeared relatively modern beside the vast antiquity of the Chaldean city. The chain of human experience lengthened before our eyes when it was realized that as Assyrian culture derived from Babylonia, so a large part of Babylonian culture, including the art of writing, was inherited by the Semites from the Sumerians.

While de Sarzec was busy at Tello, an American expedition was sent to Nippur under the lead of Peters and

Hilprecht; and the long array of magnificent volumes which embody the results of the mission, including the thousands of tablets found in the temple library, constitutes the most important source of our knowledge of Northern Babylonia. Still more recently a German mission under Koldewey commenced the systematic excavation of Babylon itself; but its operations were interrupted by the outbreak of the Great War. Though no monuments have been brought to light in Babylonia comparable in magnificence to those of Khorsabad and Nineveh, Babylonian culture towers above its neighbour. Since the discovery in the royal library of Nineveh of a cylinder containing the story of the Flood, no find has aroused such world-wide interest as that of the Code of Hammurabi, unearthed by de Morgan at Susa in 1901. The massive block of diorite, eight feet high, containing 282 paragraphs of laws, revealed in a flash a complex, refined, and orderly civilization. After expelling the Elamites about 2250 B.C. Hammurabi united North and South Babylonia into a single State, and, desiring that uniform laws should prevail, issued the code which bears his name. During the last decade the exploration of Assyria has been resumed after a long interval, and the city of Assur, the first capital, has been unearthed by the German Oriental Society. We thus learn of Assyria before the days of its greatness, when it was still a subject province under Babylonian Viceroys.

The history of the lands watered by the Tigris and the Euphrates, which was almost a blank half a century ago, may now be tentatively reconstructed. The vast mass of official correspondence, judicial decisions, and legal documents, taken in conjunction with the evidences of religion, science, and art, reveal a startlingly modern society a thousand years before Rameses and two thousand years before Pericles. Babylonia proves to have been to the

ancient East what Rome was one day to be to Europe. The Tel-el-Amarna letters prove the unchallenged supremacy of its culture over vast areas, and the revelation of the religious debt of the Jews sets the Old Testament in a new frame. So rapid is the pace of excavation and interpretation that all but the most recent narratives of the Ancient East are out of date. If we master Leonard King's sumptuous volumes on Babylonia and the latest edition of the first volume of Eduard Meyer's incomparable *History of Antiquity*, we need go no farther afield.

Scarcely if at all less remarkable has been the discovery of an advanced civilization in Crete in the second and third millenniums before Christ. While in Egypt and Mesopotamia the frontiers of knowledge were pushed back, in Crete an unknown world was brought to light. Its romantic interest was intensified by the establishment of an historic foundation for one of the most celebrated legends of the ancient world. How the Minotaur devoured the tribute of youths and maidens in the labyrinth, how Ariadne, daughter of Minos, fell in love with Theseus and gave him a sword to slay the Minotaur and a thread to retrace his steps, was known to every Greek child and has thrilled the imagination of the centuries. The exploration of the city called by Homer ' Great Knossus ' was among the ambitions of Schliemann ; but it was carried out by Sir Arthur Evans, whose labours have outlined a series of chapters in Cretan history extending two thousand years before the destruction of the palace about the year 1400. Though the Minoan language still defies attack, the frescoes, sculptures, and objects of art tell their tale of a luxurious and peace-loving community, closely connected with Egypt and forming one of the main sources of the Greek culture of a later age.

Most of us are old enough to remember the thrill of excitement when Susa and Knossus, if not Tello or Thebes,

yielded up their romantic secrets ; but the generation now growing to manhood may experience similar emotions as it watches the ghost of the Hittite Empire materialize before its eyes. The meagre references in the Old Testament have been supplemented by Assyrian and Egyptian inscriptions, revealing an important Power in Northern Syria and Asia Minor for a thousand years before it was swallowed up by Assyria. During the last twenty years Hittite remains, marked by crude vigour rather than by a sense of beauty, have been discovered all over Asia Minor and in the northern reaches of the great Mesopotamian plain. In 1911 the British Museum undertook the excavation of Carchemish on the Euphrates, the capital of the North Syrian sector of the Empire ; but the most precious results have been achieved by Winckler at Boghaz Keui, the capital of the Cappadocian portion of the Hittite dominions, which yielded a library of 20,000 tablets of the thirteenth and fourteenth centuries, now stored in the museum at Constantinople. A few bilingual inscriptions have furnished valuable clues ; but the world still eagerly awaits the coming of a new Champollion to unlock the doors of the treasure-house. Winckler himself died in 1913 ; but in 1915 the Austrian Professor Hrozny startled the world by proclaiming his conviction that Hittite was an Indo-European language. Whether or no his contention is confirmed, orientalists of both hemispheres are hot in pursuit, and it is no rash prophecy that within a decade scholars will read Hittite as they now read cuneiform and hieroglyphics, and new chapters of incalculable importance will be added to the story of the Ancient East.

The recovery of the political and religious history of the empires surrounding Palestine has run parallel with the application of critical methods to the Jewish scriptures. To read Ewald's *History of the People of Israel*, which was

regarded as dangerous by pious folk in the middle of last century, is to realize the progress of Semitic studies. The great revolution in our conception of the Old Testament which rendered Ewald out of date was accomplished by Wellhausen's *Prolegomena to the History of Israel*. That the arrangement of the Canon was utterly misleading, that the Prophets were earlier than the priestly code and that the Psalms for the most part were later than both, was proclaimed in the writings and lectures of Vatke and Graf, Kuenen and Reuss; but it was not till their discoveries were confirmed and elaborated by Wellhausen that they won their way, and it was generally recognized that their reconstruction alone rendered the religious development of the Jews intelligible. This outline was shortly after filled in by Stade in the first critical history of Israel; but his emphasis on the falsity of tradition was overdone, and subsequent critics, while accepting the late redaction of the law, have argued that parts of it are far older, in substance if not in form, than Wellhausen and his disciple were prepared to allow.

The history of the Jews owes much less to archaeological research on the arena of their historic life than Egypt or Mesopotamia. No splendid buildings or sculptures have been brought to light, and the inscriptions are few. But British, American, and German excavators have flashed light far back into the third millennium, and a partial excavation of Jerusalem has revealed a network of prehistoric tunnels and aqueducts. The historic life of Gezer has been minutely revealed by Macalister, with the strata of seven cities reaching back to the neolithic age. The most piquant result of his excavations has been to rehabilitate the Philistines, the makers of the most artistic objects found in the débris of two thousand years. Far more light, however, has been thrown on the religious customs and beliefs of the Jews by discoveries beyond

their borders. The notion firmly held by our fathers that Israel was one of the oldest of civilizations and formed a world by itself has vanished into thin air; for an older and vaster civilization has been discovered to which she owed not only her science but the larger part of her religion. The dimension of the debt to Babylonia has been and continues to be fiercely argued by conservative and radical critics; but its recognition has sufficed to revolutionize the study of early Israel and to provide a new background for the religious history of the world. The relation of the beliefs and practices of the Jews to those of other branches of the Semitic family was boldly explored by Robertson Smith, and has lately been illuminated by the epoch-making volumes of Sir James Frazer on the *Folklore of the Old Testament*.

The history of Greece, like the history of the Jews, presents a very different aspect to that which was offered to the readers of Grote, Thirlwall, and even Curtius. Schliemann's discoveries at Troy, Tiryns, and Mycenae unearthed Mycenaean civilization and gave an incalculable impetus to archaeological research; but the brilliant amateur was almost pathetically incompetent to interpret the treasures he had brought to light, and much of his work has had to be done again by Dörpfeld. Despite the achievements of archaeology, however, the period before Solon remains very dark. Barely second in importance to the discoveries of Schliemann was the Aristotelian treatise on the Constitution of Athens, which was given to the world in 1891 by Sir Frederick Kenyon and has been most authoritatively interpreted by Wilamowitz, the greatest of living Hellenists. With the growing mass of new literary material, inscriptions, coins, and papyri, the exploration of sites, the recovery of innumerable objects of art and fresh light streaming from Asia Minor and Crete, new attempts to write the history of Greece

have been made. Professor Bury's narrative, at once scientific and popular, has summarized for English readers the assured results of research ; but the most authoritative survey is that contained in the Greek volumes of Eduard Meyer's vast survey of antiquity. 'For the great tasks of history', he writes, 'salvation is only to be found when it becomes conscious of its universal character, in ancient as well as in modern times. Only by treating Greece in connection with the Mediterranean peoples can its real nature be seized.' This colossal task, which proved beyond the strength of Duncker, has been performed by the Berlin Professor, the only scholar of our time who could have accomplished it single-handed. The dazzling picture of Athenian democracy painted by Grote has faded away ; and Beloch, following in the footsteps of Droysen, dwells with greater satisfaction on the diffusion of Greek influence through the conquests of Alexander.

Greek culture has received no less attention than Greek politics. The Homeric problem continues to exert an irresistible attraction. Every expert from Wilamowitz to Gilbert Murray and Walter Leaf adds to our comprehension of the epic ; but no positive results have been established, and Holm uttered the gloomy prophecy that we shall never know whether Homer existed, who he was, or what he wrote. On the other hand we have gained a deeper insight into the early mind and soul of Greece, thanks in large measure to a group of English scholars with Jane Harrison at their head. Rohde's *Psyche*, the most illuminating treatise on any branch of Greek religion, has traced the conception of immortality through the ages. The later editions of Zeller's *Philosophy of the Greeks*, first published in 1851, kept pace with the progress of scholarship, and remains one of the glories of German scholarship. The more recent work of the Austrian Gomperz has won almost equal popularity, without

placing its predecessor on the shelf. In the realm of literature the most interesting event has been the recovery of the poems of Bacchylides and Herondas, fragments of Sappho and Pindar, Euripides and Sophocles and Menander; and the Oxyrhynchus Papyri, which have already produced undreamed-of treasures, may well have in store for us further glad surprises. The attempt to assess the influence of economic factors, courageously undertaken by Böckh and somewhat neglected after his death, has in recent years been renewed, with the fruitful results familiar to us in Zimmern's realistic picture of Athens in the fifth century.

The history of Roman studies since Niebuhr is largely the record of the activity of a single man. The most personal and popular of Mommsen's works, the *Roman History till the death of Caesar*, the greatest effort of his genius though not of his scholarship, was published as far back as 1854, and carried his name all over the world. He next turned to special departments of research, pouring forth in rapid succession his treatises on Chronology, Coinage, the Digest, and above all the *Staatsrecht*, the largest and in his opinion the most important of his works, and perhaps the greatest constitutional treatise in historical literature. Meanwhile the *Corpus Inscriptionum Latinarum*, which he edited for the Berlin Academy, was the main occupation and the most enduring monument of his life. He had devoted himself to Latin epigraphy and had edited the Sammite and Neapolitan inscriptions before the publication of the Roman History. The first instalment of the Corpus appeared in 1863, and the great scholar lived to hail the appearance of nearly twenty volumes, half of them edited by himself. The Inscriptions rendered possible a history of the Empire, and the whole world hoped that the master would write it; but he contented himself with a survey of the provinces.

The closing years of his life were devoted to a gigantic treatise on Roman Criminal Law, and to editions of Jordanes, Cassiodorus, the Theodosian Code and the Liber Pontificalis, thus enlarging the sphere of his operations till Rome was swallowed up in the Middle Ages. His publications extended over sixty years. There is no immaturity in his early works and no decline in the later. The imaginative and critical faculties met and balanced, large vision mating with a genius for detail. The complete assimilation and reproduction of a classical civilization of which scholars have dreamed ever since Scaliger has been achieved by Mommsen alone. Rome before Mommsen was like modern Europe before Ranke. We may truly say of him, as was said of Augustus, that he found it of brick and left it of marble.

Mommsen, like Ranke, was the founder of a school; and his inspiration has been felt by every worker in the field of Roman studies. His successors naturally confine themselves to some special province or period. Gaetano de Sanctis is far advanced in the most ambitious history of the Republic that has been attempted in the last half-century. Ferrero's *Greatness and Decline of Rome*, though frowned on by scholars, aroused world-wide interest by interpreting the fall of the Republic in terms of economics and psychology. The political and social crises which fill the century from Sulla to Augustus, he argues, were due to the change of customs caused by the augmentation of wealth, expenditure, and needs. Of greater value are the attempts to fill in different sections of the vast canvas of Imperial Rome, such as Gardthausen's monumental survey of the reign of Augustus, Camille Jullian's volumes on Gaul, and Professor Haverfield's slender monographs on Britain. Roman life and culture have been diligently explored; but the extreme paucity of materials makes the recovery of the atmosphere of

the early Republic almost impossible. The most daring attempt was made by Fustel de Coulanges in *La Cité Antique*, which offered a complete interpretation of early society in terms of religion. Less harmonious but more convincing pictures of religious life have been painted by Warde Fowler, while the civilization of the Empire has been successively analysed in the fascinating and authoritative works of Friedländer, Boissier, and Dill. Meanwhile archaeology contributes a steady stream of new material. Boni's excavations in the Forum and on the Palatine have produced sensational results. The unveiling of Pompeii moves slowly forward, and that of Ostia, the port of Rome, has begun. The resurrection of Herculaneum should be witnessed by the next generation if not by our own.

A more difficult because a more controversial problem than the Roman Empire is its contemporary, the early Christian Church. In the middle decades of last century Baur treated the rise of Christianity as an historical phenomenon, leaving his hearers to determine for themselves whether it was human or divine; but his influence proved more enduring than his writings. Weizsäcker, his successor at Tübingen, in his *Apostolic Age*, described with consummate scholarship and passionless serenity the life and organization of the early Christian communities. The necessity of a careful study of the soil out of which Christianity has grown is now generally recognized, and great scholars such as Schürer and Pfleiderer have recreated the religious atmosphere into which Christ was born. The constitution of the primitive Church, too long hotly discussed by the champions of rival sects, has been studied with welcome impartiality by Lightfoot and Hatch. But no man, alive or dead, can boast of such achievements as Harnack. His History of Dogma, his vast survey of Christian Literature till Eusebius, his narrative of the Expansion of Christianity before the conversion of

Constantine, are inseparable companions of the student who means business. The treasures of the catacombs have been revealed by De Rossi, to whom we also owe the publication of the Christian Inscriptions of Rome. The history of the early Christian communities in the outlying provinces of the Empire has been enriched by Ramsay's explorations in Asia Minor. While the best work naturally goes into monographs, comprehensive narratives are occasionally attempted by scholars of the first class. Renan's sparkling volumes have enjoyed immense popularity, and some of them may still be read with profit; but, like his History of the Jews, they belong rather to literature than to science. If we desire a readable summary of the scholarship of the last half-century we may turn to the volumes of the Catholic Duchesne or, better still, to those of the late Professor Gwatkin.

Imperial Rome and the Christian Church meet and blend in the Byzantine Empire, the later history of which appeared to Gibbon 'a tedious and uniform tale of weakness and misery'. Its services to civilization and the greatness of many of its rulers were revealed to the world by Finlay, whose narrative was acclaimed by Freeman as the most considerable work of English historical literature since the *Decline and Fall*. In the half-century that has elapsed since its completion, the exploration of a thousand years has gone busily forward. The lead was taken in France by Rambaud, Schlumberger, and Diehl, the latter of whom was rewarded for his efforts by his appointment as first occupant of the Chair created in Paris in 1899. Greater than any of the three was Krumbacher, the prince of German Byzantinists, for whom a Chair was founded at Munich in 1892, and whose encyclopaedic survey of Byzantine literature is beyond comparison the most important single work in this field of historical study. England is worthily represented by Professor Bury,

whose narrative of the Empire has already reached the ninth century.

Byzantium has emerged from the scholarship of two generations no longer decadent and inert but the mother of great statesmen and soldiers, the home of culture while Central and Western Europe was plunged in darkness, the rampart of Christian Europe for a thousand years against the Arab and Turk, the educator of the Slavonic races. Freeman truly remarked that Constantinople was for ages the seat of the only regular and systematic Government in the world. Its administrative machine was the most elaborate yet invented by man, and the Court was to mediaeval Europe what Versailles was to the rulers of the seventeenth and eighteenth centuries. It was indeed a bureaucratic despotism in which liberty was unknown, and, except in art, its spirit was imitative; but to preserve Greek culture during the barbarism of the Middle Ages and to defend it against the repeated assaults of Islam was to deserve well of civilization.

While the Byzantine Empire carried over important elements from the classical world, Western and Central Europe passed under the dominion of ideas which were as foreign to those of Greece and Rome as they are to the conceptions of to-day. We have outgrown the blind contempt of the eighteenth century and the gushing enthusiasm of the Romantic Movement; but it is still a difficult task to form a just estimate of the character of the thousand years that began with Augustine and ended with Macchiavelli. It is true that our materials grow from year to year; that the criticism of original authorities as taught in the École des Chartes has become something like an exact science; that thanks to Lord Bryce the Holy Roman Empire has become intelligible; that the structure and function of institutions have been patiently analysed by Waitz and Stubbs, Fustel de

Coulanges and Vinogradoff, Maitland and Gierke; that literature and art, scholasticism and the Universities, have found their chroniclers and interpreters; that every ruler and every State, every treaty and every council, may be studied in monographs innumerable. But the Middle Ages were above all the reign of the Catholic Church; and we are still far from agreement as to the merits and influence of that venerable institution which, be it human or divine, occupies a unique place in the story of civilization.

In the middle decades of last century the history of the mediaeval Church was related from very different standpoints in the widely-read works of Neander and Milman; but it was only with the opening of the Vatican archives by Pope Leo XIII in 1881 that it became possible to set forth the whole story of the Papacy and to understand the working of the machinery of Catholicism. So vast is the accumulation of official acts and documents, and such technical training is required for the task, that we shall have to wait many years till the material is surveyed in its entirety and its results made available for the use of the historian. Some idea of the value of the Registers may be gained from the Master of Balliol's pregnant lectures on Church and State in the Middle Ages, based on the 8,000 documents of the eleven years of the rule of Innocent IV in the middle of the thirteenth century. The study of these documents, he tells us, stirred him to admiration of the organization of the Papacy, and convinced him of its enormous superiority over its secular contemporaries as a centre not merely of religion but of law and government; but he adds that he derived an equally profound impression of the abuses which ate into the heart of the system, of the growing bitterness which it inspired, and of the devastating effects of the passion to erect a powerful principality in the heart of Italy.

No Protestant historian is tempted to glorify the record of the Papacy in the last two centuries before the Reformation; but it is generally agreed that in the earlier half of the Middle Ages the example and influence of the Church were a bright light shining in a dark world. This notion has been recently challenged by Mr. Coulton, who, angered by the special pleading of Cardinal Gasquet and other professional apologists, hotly denounces the exaltation of the Ages of Faith. The Middle Ages, he complains, are the one domain of history into which, in England at any rate, the scientific spirit has not yet penetrated. Taking as his text the autobiography of the Franciscan Fra Salimbene, the most precious authority for the ordinary life of Catholic folk at the high-water mark of the Middle Ages, he draws a sombre picture of manners and morals and maintains that hideous vices existed in all the Orders long before the thirteenth century. 'Imagination', he cries, 'staggers at the moral gulf that yawns between that age and ours.' His condemnation of the life and influence of the Church re-echoes in somewhat shrill tones the verdict of Henry Charles Lea, whose massive treatise on the Inquisition was rightly described by Lord Acton as the most important contribution of the New World to the religious history of the old, and whose volumes on Sacerdotal Celibacy constitute a formidable indictment of mediaeval Catholicism.

Next to the origins of Christianity the most controversial of the larger problems of history is the Reformation; and here Protestants of all schools are ranged in a solid phalanx against Catholics. That the Church was in need of reform is agreed by both sides; but the Catholic contends that the evils to be remedied have been fantastically exaggerated, that there was no need for a revolt, and that the revolution inaugurated by Luther left Germany far worse than it found her. Realizing that the Protestant

view most authoritatively presented in Ranke's classical work on the Reformation held the field, Janssen compiled a cultural history of the German people from the end of the Middle Ages to the outbreak of the Thirty Years War. Based throughout on original sources, and illustrating his thesis from every angle, his eight massive volumes were hailed with gratitude and enthusiasm by Catholics all over the world. No Catholic historical work of the nineteenth century, and certainly no attack on the Reformation since Bossuet's *Variations of Protestantism*, obtained such resounding success or led to so much controversy.

Janssen's object was to show that the fifteenth century was not a period of moral or intellectual decrepitude, with a few 'Reformers before the Reformation' crying like voices in the wilderness, but an era of healthy activity and abounding promise. He describes the flourishing state of religious and secular education, the vitality of art, the comfort of the peasantry, and the prosperity of the towns. On reaching the sixteenth century, he denounces the paganism of the Humanists and paints a terrible picture of the material and moral chaos into which Germany was plunged by the Lutheran revolt. The later volumes are devoted to the era of the Counter-Revolution and present a canvas of unrelieved gloom, immorality and drunkenness, ignorance, superstition and violence. Thus the story which opened with the bright colours of the fifteenth century closes in deep shadows, and the moral is drawn that Germany was ruined not by the Thirty Years War but by the Reformation.

Protestant historians fell upon the audacious iconoclast with fierce cries of anger, and had no difficulty in exposing his uncritical use of authorities, his habit of generalizing from isolated particulars, and his suppression of facts damaging to his own side. But though it was a dexterous

polemic, not a work of disinterested science, Janssen's book has made it impossible for any self-respecting Protestant to write on the Reformation without knowing and weighing the Catholic side. Of similar tendency though of far higher value is the monumental work in which Pastor is narrating the story of the Renaissance and sixteenth-century Popes from the Vatican archives, which neither Ranke nor Creighton had been able to employ. No really objective picture of the Reformation can be painted by Catholic or Protestant; but a good deal of firm ground has been won, and the writings of Kawerau, the greatest of Lutheran scholars, inspire us with a confidence that no writings of the last generation deserved.

Though Ranke's chief works had been published before the period to which this lecture is confined, his influence can be traced in almost every writer on modern history during the last half-century. His greatest service to scholarship was to divorce the study of the past from the passions of the present, and, to quote the watchword of his first book, to relate what actually occurred. A second was to establish the necessity of founding historical construction on strictly contemporary authorities. When he began to write in 1824 historians of high repute believed memoirs and chronicles to be trustworthy guides. When he laid down his pen in 1886 every scholar with a reputation to make had learned to content himself with nothing less than the papers and correspondence of the actors themselves and those in immediate contact with the events they describe. A third service was to found the science of evidence by the analysis of authorities, contemporary or otherwise, in the light of the author's temperament, affiliations, and opportunity of knowledge, and by comparison with the testimony of other writers. There can be no better preparation for the perils and responsibilities

of authorship than to study the critical analyses of Guicciardini and Sarpi, Clarendon, Saint-Simon, and many another, scattered through the sixty volumes of the master. And finally he taught by precept and practice the necessity of exploring the relations of States to one another and of measuring the interaction of foreign and domestic policy.

These sound principles have been applied by the scholars of all countries who have jointly built up the history of the last four centuries. We may study the Tudors under the guidance of Pollard, the Stuarts under Gardiner and Firth, the Hanoverians under Lecky, without fear that we are being misled or that essential facts are being withheld from our notice. We continue to admire the literary brilliance of Macaulay and Carlyle, Motley and Froude; but we are instinctively aware that their partisanship is out of date. The same cooling process has taken place in France, where the passions and tempers of Thiers and Michelet have tended to yield place to the calm lucidity of which Mignet and Guizot were the earliest masters. There is, it must be confessed, a good deal of the old Adam in Taine's elaborate study of Jacobinism, in Masson's innumerable volumes on Napoleon, and even in Aulard's priceless contributions to our knowledge of the French Revolution; but such works as Lavisse's full-length portrait of Louis XIV, Ségur's volumes on Turgot and Necker, Sorel's massive treatise on Europe and the Revolution, and Vandal's incomparable presentation of the Consulate rank as high in scholarship as in literature.

The unification of Germany after fierce struggles within and without naturally deflected historical scholarship from the path marked out by Ranke, who had grown to manhood in the era of political stagnation following the downfall of Napoleon. The master's Olympian serenity was deplored by the group of hot-blooded scholars who

are collectively known as the Prussian School, and who were firmly convinced that the principal duty of historians was to supply guidance and encouragement to their fellow-countrymen in the national and international problems of the time. In his gigantic work on the History of Prussian Foreign Policy, Droysen, the eldest of the Triumvirate, calls four centuries to witness that the Hohenzollerns alone, from their unswerving fidelity to German interests as a whole, were fitted to restore the Empire. He worked exclusively from Prussian archives, and history seen exclusively through Prussian spectacles was bound to be one-sided. No student of European history would contest the value of his researches; but his interpretation of Prussian policy in terms of German nationalism was at once recognized as a fundamental error, and has long been abandoned. The second member of the group, Sybel, himself one of the three favourite pupils of Ranke, revolted in middle life, and in his two great treatises on the era of the French Revolution and the foundation of the German Empire championed the policy of the Hohenzollerns and delivered slashing attacks on France and Austria, their rivals and antagonists.

The last and greatest of the triumvirate, Treitschke, the Bismarck of the Chair, devoted his life to a history of Germany in the nineteenth century which occupies the same unique place in the affections of German readers as Macaulay's unfinished masterpiece enjoys throughout the English-speaking world. Unlike the works of Droysen and Sybel, the *German History* was far more than a political narrative, and presented an encyclopaedic picture of national development. His theme was the conflict of the forces which were promoting and opposing the transformation of his country into a powerful Empire, and he judges men and states by the measure in which they promoted or obstructed that purpose. On the one side

stands Prussia, feeling her way to the realization of her historic task, on the other the middle and smaller states, aided and abetted by the arch-enemy Austria and deeply infected with the doctrinaire liberalism of France. Treitschke's stage is a battlefield, with the historian looking down and encouraging his friends with loud cries of applause. Such methods could not survive the realization of the aim which they had done so much to assist, and with Treitschke's death in 1896 the Prussian School disappeared. Its members were the political schoolmasters of Germany at a time of uncertainty and discouragement, and they braced their countrymen to the efforts which culminated in the creation of a mighty Empire. If the purpose of history is to stir a nation to action, Droysen, Sybel, and Treitschke are among the greatest masters of the craft. If its supreme aim is to discover truth and to interpret the movement of humanity, they have no claim to a place in the first class. The stream, temporarily deflected by their powerful influence, began to return to the channel which Ranke had marked out for it. Such works as Moriz Ritter's narrative of the Counter-Reformation and the Thirty Years War, Koser's biography of Frederick the Great, Max Lehmann's biographies of Scharnhorst and Stein, and Erich Marcks' studies of Bismarck and his master are as notable for their judgement as for their erudition.

The cooling process noted in the Old World has also occurred in the New, and America of the twentieth century smiles at Bancroft's complacent idealization of the Puritan colonies. Even the slavery struggle, the ashes of which are scarcely yet cold, has found in James Ford Rhodes a historian who can do justice to Jefferson Davis and Lee no less than to Lincoln and Grant. But no American scholar compares in world-wide influence with Mahan, whose study of Sea-Power in the seventeenth

and eighteenth centuries, published in 1889, not only founded a school of naval history but was inwardly digested by distinguished pupils in both hemispheres, among them the Emperor William II and Theodore Roosevelt. The Admiral's writings owe their importance not to research, for few new facts are brought to light, but to the new angle from which familiar events are envisaged. Occasionally, perhaps, the element of sea-power in the determination of a particular result is over-emphasized at the expense of other factors; but he was the first to seize the wider bearings of naval history and to make the general reader aware of its momentous significance.

The scope of history has gradually widened till it has come to include every aspect of the life of humanity. No one would now dare to maintain with my old master Seeley that history was the biography of States or with Freeman that it was merely past politics. The growth of nations, the achievements of men of action, the rise and fall of parties remain among the most engrossing themes of the historian; but he now casts his net wider and embraces the whole opulent record of civilization. The influence of nature, the pressure of economic factors, the origin and transformation of ideas, the contribution of science and art, religion and philosophy, literature and law, the material conditions of life, the fortunes of the masses—such problems now claim his attention in no less degree. He must see life steadily and see it whole. We must master such revealing works as Lecky's histories of Rationalism and Morals, Burckhardt's and Symonds' interpretations of the Italian Renaissance, Sainte-Beuve's full-length portrait of the Jansenists, Morley's studies of Voltaire, Rousseau and the Encyclopaedists, Dean Church's sketch of the Oxford Movement, and Merz's survey of European Thought in the nineteenth century,

if we are to understand the throbbing life of the human spirit. We must measure the operation of economic factors and forces and profit by the faithful labours of Schmoller and Thorold Rogers, Cunningham and Kovalevsky, the Webbs and the Hammonds, if we are to visualize the life of the unnumbered and the unknown who have done the routine work of the world.

The fifty years roughly sketched in this lecture witnessed an immense and almost immeasurable advance in historical studies. The technique needed to turn raw materials into the finished article kept pace with the supply, and men learned to write the history of their own country, their own party, and their own beliefs, as impartially as that of other lands and other creeds. But the Great War has ravaged the placid pastures of scholarship no less than the fields of France and Belgium. Too many historians in every belligerent country have lost their heads and degenerated into shrieking partisans. International co-operation in the pursuit of truth, which is the condition of progress in history no less than in science, has been rudely shattered by the clash of arms. With all but the calmest minds, national self-consciousness and national self-righteousness have rendered frankness in dealing with the record of our late allies and fairness in dealing with our late enemies difficult if not impossible. Many years will elapse before the European atmosphere regains the tranquillity in which alone the disinterested pursuit of truth can flourish. Meanwhile it is a source of legitimate satisfaction that while the world was rocking to its foundations two English historians, Sir Adolphus Ward and Mr. William Harbutt Dawson, were narrating the development of Germany in the nineteenth century with a steadiness of pulse unsurpassed in the piping times of peace. The historian is a man of flesh and blood and may love his country as ardently as other men; but, if he is

to be worthy of his high calling, he must trample passion and prejudice under his feet and walk humbly and reverently in the temple of the Goddess of Truth.

### For Reference

Gooch, *History and Historians in the Nineteenth Century* (Longmans).

# VI

# POLITICAL THEORY

A. D. Lindsay

Political Philosophy or the philosophical theory of the State has closer relations with history than any other branch of philosophical inquiry. It is indeed distinguished from history in that it can disregard the success or failure, the historical development of this or that state. For it is concerned not with historical happenings but with ideals, not with the varying extent to which different states have approximated or fallen short of their purpose, but with that purpose itself, not, in short, with states but with *the* State. Yet this need not involve that the ideal, *the* State, is always and everywhere the same. Ideals are born of historical circumstances and fashioned to meet historical problems, and the would-be timeless ideals which political philosophers have put before us have always borne clear marks of the country and time of their origin. The ideal which men have set themselves in political organization has varied from time to time. That such variation is inevitable will be clear if we ask ourselves what we can possibly mean by an ideal state. That states fall short of their ideal because of the imperfections of their citizens is clear enough. All political life demands a certain standard of moral behaviour, of capacity to work for a common good, and an understanding of the results of our own and other people's actions. Were human selfishness completely overcome, the state would still be necessary to correct individual shortsightedness. The policeman, exempt from the cares of apprehending

criminals, would still be needed to control traffic. But imagine, not that all citizens attained a certain standard of moral and intellectual behaviour, as the ideal demands, but that they were all perfectly good and perfectly wise, should we need any kind of government at all? Is not the supposition of perfection so far removed from any state of affairs we can really think of or plan for, that it cannot enter into our reckoning, ideal or practical? Every ideal takes certain facts of human life for granted whilst it tries to improve others. All ideal states, Plato's as well as others, assume certain facts about human nature and human society. These facts may and do vary. The Greek city state assumed that a state must be small, if it was to have the intensive life they demanded. The Roman Empire was a denial of the anarchy to which the Greek ideal had led, but it lost in intensity what it gained in extent. All political ideals assume a certain sociological background on which the state is based and from which spring the problems which the state is intended to solve. As this sociological background varies from time to time, *the* State, the purpose which men set before themselves in political organization, will vary also. The Greek city state and the mediaeval state were not different approximations to the same ideal. They were the expressions of different ideals. They rested on different assumptions, e.g. as to the place of authority in society. With the disappearance at the Reformation of one of the great assumptions on which the mediaeval state had been based, a new theory of the state was inevitable. The national state of the seventeenth century was something new in history, and Hobbes differs from Aristotle, not because Hobbes is perverse and Aristotle right, though Hobbes often is perverse, but because the political problems which Hobbes and Aristotle had to face were not the same.

Two great historical facts at the end of the eighteenth

century, the French Revolution and the Industrial Revolution, profoundly modified the basis of political organization. The modern state in consequence differs in many important respects from any that have preceded it. It does not rest on the common acceptance of authority, either religious, as did the mediaeval state, or personal, as did the seventeenth-century state. Unlike the Greek city state, it is large. Its administration is concerned with millions who cannot be in personal relations to one another, or share the same intensive life.

With the nineteenth century, then, a new chapter in the development of political theory begins as the peculiar problems of the modern state develop. Professor Dicey, in his *Law and Opinion in England*, has divided the century into two periods of political thought—Individualism and Collectivism—one marking the decrease, the other the increase of the power and authority of the state. When our period begins, the day of individualism was passing. Ever since the Reformation it had, in spite of Burke, dominated political theory. Two forces had given it strength—one idealistic, one scientific. It represented the revolt of the individual conscience against the claims of authority, and as such was a theory which attempted to limit the power of government over the individual, whether by an appeal to natural rights in Locke and Tom Paine, or to the greatest happiness of the greatest number in the Utilitarians, or to the super-eminent value of individual liberty as set forth in John Stuart Mill's noble panegyric. The French Revolution gave a notable impetus to this side of individualism, with its passionate assertion of the principle that political institutions exist for man, not man for political institutions, and that all government must be tested by the life which it enables each and every one of its citizens to live. Individualism in this sense is concerned with the discovery of principles by which the

power of government over the lives of its members may be limited. It is not necessarily a theory of the nature of society. Hobbes, however, was an individualist as well as Locke, and for Hobbes the individual was the scientific unit from which societies and states were built up—the starting-point for a scientific treatment of society. As the French Revolution gave a fresh impulse to idealistic individualism, the Industrial Revolution reanimated the scientific, for it displayed the economic man, Hobbes's hero, come to life and a respectable member of society. With him came the growth of political economy, apparently the first really scientific study of man. From Political Economy Darwin borrowed the conception of the struggle for existence and the survival of the fittest, and from the new biology the doctrine of Evolution through individual competition returned to reinforce with the prestige of the new science the economists' conception of society.

For the first half of the nineteenth century all the forces inspiring individualism seemed to work together, for economics and biology breathed a benevolent optimism which promised that if the scientific forces of individualism were left to work unchecked by state restriction, they would of themselves produce that individual liberty and free development which idealistic individualism desired.

The development of the industrial revolution, however, soon made economic optimism impossible, and with its decay idealistic and scientific individualism parted company. The former retained its concern for individual liberty but came to see that its ideal was as much threatened by economic dependence as by state control, that the choice for most members of society was not one between state interference and no interference at all, but between the state controlling or not controlling the power of interference possessed by the economically

superior members of society. On such principles Henry Sidgwick justified an extensive system of state control of industry, and for such reason the strongest supporters of the rights of the individual have been found among Socialists.

Scientific individualism, which found its unit in the economic man and sought to absorb in economics both ethics and politics, was not in essence affected by the discrediting of economic optimism. It painted the struggle between individuals in gloomy instead of in attractive colours, its 'scientific' prepossessions inclined it to a determinism which led easily to the economic theory of history and even, by a curious conversion of opposites, to the 'scientific socialism' of Karl Marx. In its essence it is a denial of the real existence of politics. For it is a theory of society which denies the possibility of a will for the common good and therefore the possibility of political ideals.

It was this powerful and malignant theory which was attacked and answered by the modern idealist school represented by Green, Wallace, and Ritchie, and, in the present day, by Dr. Bosanquet. These writers gave us a theory of the state based on the importance and reality of social purpose. They went back to the theory of the Greek city state expounded by Plato and Aristotle, finding modern reinforcement in the teaching of Rousseau and more especially of Hegel. Their destructive criticism of 'scientific' individualism was reinforced by the teaching of anthropology and of historical jurisprudence, which emphasized the part played in early forms of society by social solidarity and showed the inability of individualism to account for the development of society. Their destructive criticism was, however, the least part of their achievement. They exhibited convincingly the state as the product of will and purpose, based on man's moral nature

and being in turn the form in which that moral nature expresses itself. In a notable phrase of Dr. Bosanquet's, a phrase to which he has given constant detailed amplification, 'institutions are ethical ideas'; moral purpose may seem to shine dimly enough in many actual institutions, but it is the only light which shines in them at all, and only in that light can their meaning and reality be understood.

The main principles of this idealistic school may be safely said to have by this time established themselves against criticism. Of recent years Social Psychology has done much to explain the gap between the contemplated purpose and the actual working of institutions, and has given precision and definiteness to those elements in human nature which strengthen or weaken social solidarity. Economists have come to see that economic relations are possible only within the framework of a society which has its root in moral and political purpose, although within that framework they may be theoretically isolated and studied by themselves. Sociology, after many false starts, inspired by the mistaken belief that a scientific treatment of society should interpret higher forms in the light of lower, has now found it possible to study the manifold variety of institutional and social life on the basis provided by idealistic philosophy.

As a theory of society, in short, this philosophy holds the field. It has been criticized of late years as a theory of the state, and as these criticisms show both where the idealistic theory was in some respects defective and also where the chief problems for political philosophy in the future are to be found, I shall devote the greater part of my lecture to these considerations.

The idealistic school drew their inspiration from the theory of the Greek city state, and in their conception of the function of the state they assumed an essential

identity between the Greek city state and the modern nation state. In so far as these two types of state have been the most self-conscious types of society that have existed, and have therefore displayed explicitly the purpose that is implicit in all society, the identification has been sound and fruitful; in so far, however, as the identity is pressed to imply that in the modern state the definite political or governmental organization should play the same function as it did in the Greek city state, the identification has been mistaken.

The Greek city state failed conspicuously to solve the problem of inter-state relations, and its philosophers, instead of recognizing the failure and trying to remedy it, made their ideal state even more self-centred and autonomous than the existing states around them. Modern Idealism, just because it glorifies the state as the necessary upholder of moral relations, has often found it hard to regard the state as in its turn a member of a moral world.

Again, the Greek city state, just because it was small, could take up into itself all the various social activities of its members. The state, in the sense of the Community in its political organization, directed and inspired Society, and the distinction between society and the state was not of great importance. In the modern world the boundaries of political organization are not nearly as definite boundaries in society as are the boundaries of the Greek city state. There are all manner of associations whose members are of different states and whose purposes are but to a small degree inspired or controlled by political organizations. Modern states are not all or completely nation states, and the nation is not as pervading and dominating an entity as was the Greek *polis*. This is not to say that the non-political associations could do without the state, as some recent writers have contended.

Churches, e.g., could not exist were there not law and government. Yet it is impossible to maintain that in any real sense they are upheld by the state. They clearly get their inspiration from other sources. The difficulty is not evaded if we go behind both political and non-political organization to the community in which both exist and which upholds them both. For what in this reference is ' the community ' ? In regard to the political association it is the special solidarity of people living in a certain area ; in regard to the non-political organization it is the solidarity of a section of the world-wide society, marked off from the rest on a non-territorial basis. The community in the two cases is not the same. Hence there arises in the modern state, as there arose in the mediaeval, a conflict of loyalties between the state and non-political associations. If we divide the world into states whose lines of division follow the divisions of the organization of force, we are faced with a host of problems concerning the proper place in society of these force-bearing organizations, and their relation to other associations.

In considering both sets of problems, international and internal, we may either begin with the division of the world into states, each of which will be an approximation of *the* State which we are studying, or we may regard the whole world as in some sort one society, covered with a network of overlapping associations of all kinds. On the former view the world is thought of as consisting of a number of independent communities, each shaping and controlling the various forms of social life within its own borders, upholding their moral world, and each being as a whole single entity a member of the community of states. On the latter we start with the solidarity and will to co-operate which pervades in all manner of degrees the whole world society, and regard the organization of force

which marks the state as being the mark of a settled and determined form of that will to co-operate which is characteristic of all forms of human association. How dominant and determinant over other forms of association is that special form which controls organized force—that is the problem before us. We are concerned in technical language with the problem of sovereignty.

Let us consider first the problem of international relations. The doctrine of sovereignty, formulated in the seventeenth century and crystallized by Austin at the beginning of the nineteenth, made sovereignty the hall-mark of the state. The person or persons, to whom the bulk of a given society render habitual obedience, either do or do not render habitual obedience in turn to some other person or persons. If they do not, the society constitutes a sovereign state; if they do, it is only part of a sovereign state. The world therefore was regarded as containing a number of sovereign independent states. As sovereignty and law necessarily went hand in hand, there could be no law between sovereign states. There could only be world-wide law if there were one world-wide state. So long as there are more states than one, there are communities between whom there is no law. The doctrine of sovereignty was in its inception individualist, but in so far as concerns the implications, though not the basis of sovereignty, it was taken over by Hegel and by the English idealist school with the exception of T. H. Green. Idealism, indeed, always insisted that will, not force, was the basis of the state, but whereas in Green the state is constituted by the moral willing of individuals for a general good, in Hegel and in Bosanquet the conflicting willings of individuals are reconciled by their being taken up into the supra-personal will of the state. With the former therefore the morality of individuals is the primary fact, the existence of the state the secondary;

with the latter on the whole the existence of the state is the primary moral fact, the moral willing of individuals secondary. Just because the wills of individuals are reconciled, not by each recognizing certain abstract principles of duty, but by being taken up into the supra-personal will of the state, where there is no such supra-personal will there is no reconciliation of conflicting wills and no morality beyond and outside the boundaries of communities. Hence arises a conception of the state which fits into the absolutist doctrine of sovereignty which we have described.

The first thing to be said about this doctrine of the independent sovereign state is that political facts have obviously outrun it. It was derived from a study of the unitary state and will hardly fit any federal state. It is manifestly absurd when applied to the British Empire. If we disregard, as we must, the superficial legal facts and look at the real nature of the British Empire, we must admit that the Dominions are neither separate sovereign states nor parts of one sovereign state, and that the unity of the Empire is a unity of will—a willingness to co-operate which has not yet clothed itself in legal forms, and which is not, for geographical and other reasons, as intense as that will to co-operate which must be at the basis of a unitary sovereign state. This must suggest to us that the willingness to co-operate admits of degrees, and the relations of communities to one another to have stability must reflect these degrees. The importance of these considerations is obvious if we think of the problems with which we are confronted at the present moment, when we are attempting to form an international organization. The problems which have confronted the Peace Conference have brought two things clearly to light. The first, that the nation state is far too simple a solution of modern difficulties. Self-determination will not carry

us very far. There are many cases where the boundaries dictated by nationality on the one hand and by the need for common organization on the other do not coincide, and where the only solution is one which impairs sovereignty in the old sense. The second is that the League of Nations, if it is to mean anything at all, will have to impair the sovereignty of the states which join it without thereby constituting in itself a world state. Much of the opposition to the League of Nations is concerned with this implied impairment of sovereignty. Whether this opposition will weigh with us will depend on whether we regard the independent sovereign state as the be-all and end-all of political theory, or see that the fundamental fact to be taken into account is man's readiness to co-operate for common purposes. If we take the latter view, we shall still be holding to what was the fundamental contribution of the idealist school, the teaching that the basis of all political questions is moral. The essence of the matter is how we are prepared to treat other people, for what purposes we are prepared to act with them, how far we are prepared to recognize and give settled organized recognition to our mutual obligations. The political organization is the vehicle and not the creator of these moral facts. As the facts vary, so will its forces. We may learn from the Hegelian school to recognize the enormous importance of the state, the great achievement of the human spirit which its organization represents, and the folly of light-heartedly endangering its existence, without making one form which it has taken in the nation state sacrosanct and absolute.

Let us turn now to the second of our problems, the relation of the state to associations, such as churches and trade unions, within its borders. Here again we find a principle, originating in earlier individualist theory, taken up into idealism. In the beginnings of modern

political theory in the seventeenth century, the absolutist doctrine of the state was the outcome of the need of the times for strong government. A state that was not master in its own house was felt to be incapable of the hard task these troublous times set before it. The French Revolution made no change in the attitude of the state to associations. New-born democracy was not inclined to look favourably on the independence of religious non-democratic associations, and the fact that Leviathan had become democratic was thought to have transformed him into a monster within whose capacious maw any number of Jonahs might live at ease or liberty. Association against a tyrant might be a sacred duty; against the people it could only be a suspicious superfluity. In a very different way the Prussian state, centralized, efficient, and Erastian, organizing the whole resources of the community under the guidance of the state, enforced the same principle. The state is a moral institution, it cannot surrender the inculcation and upholding of morality to an alien or independent body. From all the sources of modern idealistic political theory, Plato, Rousseau, Hegel, comes the same principle of state absolutism over associations within the state. The principle was put in idealistic form in the doctrine that the state is a supra-personal will, absorbing in itself the activities of its members.

Of late years dissatisfaction with this doctrine has been making itself more and more loudly expressed. Along with an increasing belief in the extension of the state's administrative capacities has gone an increasing disinclination to leave men's moral and cultural activities to the political organization. The ideal of the *Kulturstaat* is now sufficiently discredited. Men are coming more and more to recognize the part played in life by non-political organizations and to insist on the importance of preserving the independence and freedom from state control of such

associations as churches. The loyalty of individuals to their associations, churches or trade unions, has been conflicting with their loyalty to the state, and men are not prepared to admit that in all such cases of conflict loyalty to the state ought to be paramount.

Curiously enough, the central doctrine of the later idealistic school, the personality of the state, lent a force to the criticism of the doctrine of state absolutism. If the state can be described as a person, may not also a church and a trade union? We have begun to learn from Gierke, interpreted and reinforced to us by Maitland, that what is sauce for the state goose is also sauce for the corporation gander, and that associations within the state may claim from the state a greater independence and a recognition of their intrinsic worth because they, as it, embody in some sense a real will over and above the wills of their members. This doctrine of corporate personality is of great interest and complexity, and has not yet been satisfactorily worked out. But I shall not discuss it now because it will not help us far towards a solution of the problem of what are the proper relations between associations and the state, be they personalities or not.

Recent writers have mainly attempted to solve the problem by the principle of differentiation of function. This will certainly help us in considering the relation of church and state. For we can say that the task of the political organization is to maintain the conditions of the good life, leaving the work of developing the meaning of the good life, the fostering and inculcation of ideals, to voluntary associations. The state will then maintain a certain minimum of moral behaviour, while the more delicate and freer work of inspiration is left to individuals and voluntary associations. This will not always provide a clean-cut and sufficient differentiation. The state must

make up its own mind what is essential to the maintenance of the good life, the voluntary associations may hold that what the state ordains is flatly evil, as the state may hold that what a voluntary association teaches is subversive of all that makes a common ordered life possible, and both must be true to the facts as they see them. When such conflict arises, as it has arisen lately, if the only answer we can give at present is the old answer given by Dr. Johnson, 'The state had a right to martyr the Early Christians, and they had a right to be martyred,' yet at least we are farther on if each side honestly recognizes the importance of the work that the other has to do.

When we come to the problem raised by the present position and claims of Trade Unions, differentiation of functions is less satisfactory. Let us first look at the problem as it confronts us to-day. There was a time when the state was doubtful whether it should allow trade unions to exist. The Political Economy prevalent in the earlier part of the nineteenth century taught that trade unions were either unnecessary or useless—unnecessary in so far as economic relations, if unhindered by regulations from the state or from combinations, were regarded by economic optimism as themselves producing satisfactory social conditions; useless where Political Economy had substituted for optimism a belief in 'iron laws' whose results no combination or government regulation could affect. We now see that economic relations, just because they are possible between men who have no common purpose, need regulation inspired by a common purpose, and can be affected by such regulation. The growth of governmental interference with industry and of trade unionism are part of the same movement to control the working of economic relations with a view to maintaining the conditions of the good life. Trade unions have grown and are still steadily growing in size and

importance. For a large portion of the nation loyalty to a trade union has become the most obvious form of collective loyalty or general will. This has been accompanied by an inevitable decrease in what we may call territorial loyalty. The result of the increase in means of communication and the growth of large towns has been that men's common interests as members of the same trade or as employees in the same workshop are coming to mean more and to constitute a greater common bond between men than their common interests as dwellers in the same locality. The trade union has often a more live and real general will than the Parliamentary constituency. Men's aspirations and ideals for their common life are being expressed more truly through trade union organizations than through Parliament. The growth in the prestige of organized labour is therefore coincident with a decay in the prestige of Parliament. Parliament, however, based on a local sub-division of the nation, is at present the only political organization of the nation. Trade union organization, as a political organization, has no constitutional authority, and all the general will which it represents can find no regular national expression. The result is that it either uses the territorial organization by getting men who really represent their Trade Union elected as members for Parliamentary local constituencies, to the detriment of both the territorial and the trade union organization, or acts as an *imperium in imperio* by making demands on and issuing ultimata to Parliament. We seem to be approaching a crisis where the trade unions are asking whether they will allow the state to exist.

This is obviously an unsatisfactory state of affairs. What is the cure for it? Differentiation of functions, as I have said, will not help us here. Some writers have maintained that vocational organization should concern itself with industrial or economic matters, the state, as

we know it, with political matters. But can we possibly distinguish between industrial and political matters? If the aim of politics is to regulate men's actions in the light of men's common interests, the action of a trade union is in its essence political. Its differentiation from government is that it is concerned with the common interests of a few rather than the common interests of all. The difference between a trade union and a parliamentary constituency is that the sub-division of the general common interest which each represents rests on a different basis of division. The whole community might as well be organized by vocations as it now is by localities. There would seem to be certain advantages in both principles of differentiation, and one obvious practical solution of our present difficulties is that the supreme organ of government should in its two chambers represent the nation as organized on both principles, vocational and territorial.

We seem to have come now to the discussion of political machinery, but, as in our discussion of the League of Nations, we can see that our attitude to such questions of machinery will vary as we regard the force-bearing organization with its national and territorial basis as the primary fact in the community, to be distinguished sharply from all other organizations, or regard the possession of organized force as the expression of men's settled and permanent will to maintain their common interests and safeguard the conditions of the good life. If we consistently follow out Green's dictum that will, not force, is the basis of the state, we shall be anxious that the political organization to which we render obedience shall follow the actual ramifications of common interests and of men's willingness to co-operate, and shall recognize that the national state with its territorial basis represents only one form of such ramification.

The view that political action is not confined to constitutional and governmental channels will not imply that we must give up the distinction between society and the state. For, on the one hand, trade unions have only arisen because of the special need for a *common* safeguarding of common interests produced by economic relations. Economic relations need to be controlled by, but cannot be superseded by, politics. On the other hand, as we have seen, the work of such associations as churches is different in kind from the work done by political organizations. The inculcation and development of moral ideals and the safeguarding of the conditions of the good life are complementary functions. Each is impossible without the other. But that does not make them identical, however closely interfused they may be.

If, then, we accept the political theory of idealism as a theory of society, we must recognize in social life the distinction between ethical, economic, and political relations, and the task before Political Theory is to define the relations between politics and economic activities on the one side and ethical activities on the other, and that in a society which is not confined within the bounds of a single nation state. The intricate ramifications of vast economic undertakings and the common aspirations and ideals of humanity are but signs of a solidarity of mankind that political philosophy must recognize in all the problems it has to face.

### For Reference

Green, *Principles of Political Obligation.*
Bosanquet, *Philosophical Theory of the State.*
Barker, *Political Thought in England from Spencer to to-day.*
Hobhouse, *The Metaphysical Theory of the State.*
Figgis, *Churches in the Modern State.*
Cole, *Labour in the Commonwealth.*
Cole, *Self Government in Industry.*
Delisle Burns, *The Morality of Nations.*

# VII

# ECONOMIC DEVELOPMENT[1]

C. R. Fay

## 1. The Industrial Scene, 1842

1. Let us hover in fancy over the industrial scene in 1842, and photograph a stage of the economic conflict which the people of England were waging then with the forces which held them in thrall.

Our photograph shows us great white lines, continuous or destined to become continuous; they are numerous in Durham and Lancashire, and the newest lead up to and away from London. These white lines are the new railroads of England, and the myriad ant-heaps along them are the navvies. In the year 1848 their numbers had risen to 188,000.[2]

What is a navvy and how does he live? The navvy is an inland navigator who used to dig dykes and canals and now constructs railroads. In the forties the navvies are getting 5*s*. a day, and for tunnelling and blasting even more, but they are a rowdy crowd, and many of them are Irish. Said the Sheriff substitute of Renfrewshire in 1827: 'If an extensive drain, or canal, or road were to make that could be done by piecework, I should not feel in the least surprised to find that of 100 men employed at it, 90 were Irish.'[3] In 1842 they are building railroads,

[1] From the writer's forthcoming book *Life and Labour in the Nineteenth Century*, to be published by the Cambridge University Press.

[2] Tooke and Newmarch, *History of Prices*, v. 356.

[3] *Commons Committee on Emigration*, 1827, Q. 1761.

and when they and the Highlanders are on the same job, it is necessary to segregate them in order to avoid a breach of the peace. The Irish sleep in huts and get higher pay than the natives who are lodged in the neighbouring cottages. The English navvy too keeps out the Irishman if he can. On a track in Northamptonshire, 'There is only one Irishman on the work, for they would not allow any other Irishman.'[1]

In the South of England wages are lower and the navvies are less expert. In South Devon 'very few North countrymen; they are men who have worked down the line of the Great Western; that have followed it from one portion to another'.[2] The riff-raff from the villages cannot work stroke for stroke with the navvy. 'In tilting the waggons they could, but in the barrow runs it requires practice and experience.'[3]

The high wages of the navvy are offset by the disadvantages of his employment. He is lucky if he gets the whole of his earnings in cash. In the Trent Valley they are paid once a month, 'but every fortnight they receive what is called "sub" that is subsistence money, and between the times of subsistence money and times of the monthly payment, they may have tickets by applying to the time-keeper, or whoever is the person to give them out, for goods; and those tickets are directed to a certain person; they cannot go to any other shop.'[4]

The huts in which they live are little better than pigsties, and especially bad for regular navvies, who take their families about with them. In South Devon, 'man, woman, and child all sleep exposed to one another'.[5] On a section of the London and Birmingham Railway

[1] *Commons Committee on the Condition of Labourers employed in the Construction of Railways*, 1846, Q. 866.

[2] Ibid., Q. 217.

[3] Ibid., Q. 897.

[4] Ibid., Q. 733.

[5] Ibid., Q. 193.

fever and small-pox broke out. 'I have seen', says an eye-witness, 'the men walking about with the small-pox upon them as thick as possible and no hospitals to go to.'[1] The country people, the witness continues, make money by letting rooms double. When one lot came out, another lot went in.

Such is the navvy's life at work and at rest.

2. If we can suppose that our camera is capable of distinguishing centres of industrial activity, then our picture will give us 'vital' patches, which stand out against a background of deadness. This deadness is rural England.

What is the condition of the rural counties of Wessex? 'Everywhere the cottages are old, and frequently in a state of decay.' 'Ignorance of the commonest things, needle-work, cooking, and other matters of domestic economy, is . . . nearly universally prevalent.'[2] To make both ends meet the wife has abandoned her now useless spinning-wheel and hired herself out to hoe turnips or pick stones.

On the little farms inside the factory districts of Lancashire and Yorkshire, on which the country hand-loom weavers eke out a miserable livelihood by cultivating patches of grass land, there is distress more acute than ever was known in a Dorset village. But in Northumberland, by exception, there is a decent country life. 'What I saw of the northern peasantry impressed me very strongly in their favour; they are very intelligent, sober, and courteous in their manners. . . . The education in Northumberland is very good; the people are intelligent and cute, alive to the advantages of knowledge, and eager to acquire it; it is a rare thing to find a grown-up

[1] Ibid., Qs. 869–78.

[2] *Report of Poor Law Commissioners on the Employment of Women and Children in Agriculture* (1843), pp. 20, 25.

labourer who cannot read and write and who is not capable of keeping his own accounts.'[1] The same sort of thing was said of Northumberland in 1869: 'If all England had been like Northumberland, this commission ought never to have been issued.' The Commissioner found that though the labourers worked harder and longer than in the South they were not working against starvation. They were enjoying a rough plenty, which included fresh milk. The rest of the family earned sufficient to leave the married woman in her home and no children under twelve were employed in field labour.[2]

Here then in Northumberland there is a decent country life, but elsewhere there is an atmosphere of deadness; and it is this deadness of the countryside which explains the horror that new comers to industrial regions frequently expressed at the prospect of a forcible return to the parish of their origin.

'I was told,' says a visitor to Lancashire in 1842, 'that there had been several instances of death by sheer starvation. On asking why application had not been made to the commissioner of the parish for relief, I was informed that they were persons from agricultural districts who, having committed an act of vagrancy, would be sent to their parishes, and that they had rather endure anything in the hope of some manufacturing revival, than return to the condition of farm labourers from which they had emerged. This was a fact perfectly new to me, and at the first blush, truly incredible, but I asked the neighbours in two of the instances quoted . . . and they not only confirmed the story, but seemed to consider any appearance of scepticism a mark of prejudice or ignorance.'[3]

[1] Ibid., pp. 299–300.

[2] *Report of Commissioners on the Employment of Young Persons in Agriculture*, p. 64.

[3] Dr. Cook Taylor, Letter to the *Morning Chronicle*, dated from Rossendale Forest (Lancashire), June 20, 1842.

3. Though there is little peasant life in England, there is life of a feverish desperate order for many who live in country places. These people are not farm workers nor yet are they craftsmen who supply the industrial needs of the village. They are feeders to the towns, engaged in what is misnamed 'domestic industry'. The life they lead is a sordid replica of an all too sordid original.

Cobbett in a tirade against the Lords of the Loom[1] idealized the old-time union of agriculture and manufacture. The men should work in the fields, while the women and children stayed at home at their spinning wheels, making homespun for the family garments. But the picture was a vanishing one even in his day. Domestic industry does not mean this. The rural distress revealed in the Hand-loom Weavers Commission is the distress of specialized hand-workers, male and female, who are clinging desperately to the worst-paid branch of a dying trade. The worsted industry of East Anglia is perishing, defeated by the resources of Yorkshire, of which the power-loom is only one. The cloth trade in the Valley of Stroud (Gloucester) is a shadow of its former self. It has lost the power of recovering from a depression. The next period of slackness that comes along may bankrupt the business and rob a village of specialized hand-workers of their main employment.

In Devonshire, the serge trade, which used to give employment to looms in almost every town and village, has become so unremunerative that it has passed into the hands of the wives and daughters of mechanics and agricultural labourers. In Oxfordshire in 1834, we are told by the Poor Law Commissions of that year, glove and lace making were vanishing occupations. In the neighbourhood of Banbury 'some make lace and gloves

[1] *Rural Rides*, i. 219.

in the villages. Formerly spinning was the work for women in the villages, now there is scarcely any done.'[1]

Since 1834 the process of disintegration had proceeded apace.

We must not, however, convey the impression that domestic industry in 1842 had all but vanished from the countryside. In its ancient strongholds it still endures, but it is in an unhealthy condition, and the towns are sucking its life-blood away.

To illustrate this, let us describe the course of a boom in domestic industry and study how the trade boom of 1833–7 reached through to the country silk weavers in Essex and other places all around London. The terms which we usually apply to the cultivation of land are apposite. The town workers represent the intensive margin of cultivation, the country workers the extensive margin. First of all the Spitalfield weavers, who have been short of work, have more work given to them. The weavers' wives also get work, and their boys and girls who never were on a loom before are now put to the trade. Fresh hands are introduced. From the Metropolis the demand for labour pushes outwards over the country. Recourse is had to 'inferior soils'. Old weavers in the villages get work, together with their wives and families. Even farm labourers are impressed. Blemishes for which at other times deductions would be claimed are now over-looked. Carts are sent round to the villages and hamlets with work for the weavers, so that time may not be lost in going to the warehouses to take back or carry home work. Then comes the ebb: 'the immediate effect is that all the less skilful workmen, the dissolute and disorderly, are denied work; the third and fourth looms, those worked by the sons and daughters of the weavers, are all thrown out of use'. The intensive-

[1] *Poor Law Commission of* 1834, Appendix.

ness of cultivation has been reduced in the towns, the least remunerative no longer pays.

The ebb of the tide, which reduces the quantity of employment in the towns, leaves the country districts high and dry. 'At such times the country towns and villages to which work is liberally sent, when there is a demand for goods, suffer still more. A staff or skeleton only is kept in pay, and that chiefly with a view to operations when a demand returns.'[1] A skeleton—well said.

Occasional cultivation is bad for land, and worse for human beings. The ribbon-weaving villages north of Coventry are a disorderly eruption from the town. Coventry itself has the better-paid 'engine weaving'; the rural districts have the 'single hand trade'. The country workers, say the Commissioners, 'retain most of their original barbarism with an accession of vice'. The yokels who went out to the French wars innocent boys returned confirmed rogues. Bastardy is greater than ever, despite the new Poor Law. 'It may surprise the denouncers of the factory system to find all the vices and miseries which they attribute to it, flourishing so rankly in the midst of a population not only without the walls of a factory, but also beyond the contamination of a large town.'[2] It may have surprised such people, but it does not surprise us who are surveying the industrial scene and beginning to apprehend the rottenness of that worm-eaten structure which under the misnomer of domestic industry marks the half-way house to full capitalism.

4. Let us now journey to the factory districts of Lancashire and the West Riding of Yorkshire where town

[1] *Hand-loom Weavers' Commission, Final Report*, 1841, p. 18.
[2] *Hand-loom Weavers' Commission, Assistant-Commissioner's Report*, 1840, Part IV, pp. 76–81.

lies close upon town, and the tall chimneys envelop in smoke the cottages in which hand-loom weavers work and the children of hand-loom weavers sleep. Let us suppose that we have found our position by Leeds. We should like to follow the track of the new railroads, for we have in our pocket a small green book :

' Bradshaw's Railway Time Tables and Assistant to Railway Travelling '.

' 10th Mo. 19th, 1839. Price Sixpence.'

Bradshaw tells us that we can get from Littleborough to Manchester in 11 hours—via Rochdale, Heywood, and Millshill—but it is not clear how we are to get to Littleborough. So we follow an alternative route, the canal. It is a fashionable method of transit for mineral traffic and paupers. Mr. Muggeridge, the emigration agent, tells us how he transported the southern paupers in 1836. ' The journey from London to Manchester was made by boat or waggon, the agents assisting the emigrants on their journey.'[1] When we got up our geography for the tour out of Thomas Dugdale's ' England and Wales ' this is what we read at every turn : ' Keighley : in the deep valley of the Aire, its prosperity had been much increased by the Leeds and Liverpool Canal which passes within two miles.' ' Skipton : in a rough mountainous district. The trade has been greatly facilitated by the proximity of the town to the Leeds and Liverpool Canal.' So the Leeds and Liverpool canal shall be our guide.

We leave Bradford, Halifax, and the worsted districts to the left of us, and passing by Shipley, approach the cotton district near the Lancashire border. ' The township of Shipley is the western-most locality of the Leeds clothing districts ; it runs like a tongue into the worsted

[1] *Second Annual Report of the Poor Law Commissioners*, 1836.

district. In like manner the worsted district blends with the cotton district at Steeton, Silsden, and Addingham.' We are passing, the Commissioner tells us, from high wages to low. 'The cloth weavers of Shipley work for wages little, if any, higher than those of the worsted weavers; while the worsted weavers north-west of Keighley are reduced down to the cotton standard.'[1]

At Keighley we bend sharply south and soon reach Colne in Lancashire. Dr. Cook Taylor describes the conditions there in the early part of 1842:

'I visited eighty-eight dwellings, selected at hazard. They were destitute of furniture save old boxes for tables or stalls, or even large stones for chairs; the beds are composed of straw and shavings. The food was oatmeal and water for breakfast, flour and water, with a little skimmed milk for dinner, oatmeal and water again for a second supply.' He actually saw children in the markets grubbing for the rubbish of roots. And yet, 'all the places and persons I visited were scrupulously clean. Children were in rags, but they were not in filth. In no single instance was I asked for relief. . . I never before saw poverty which inspired respect, and misery which demanded involuntary homage.'

From Colne we journey to Accrington. Of its 9,000 inhabitants not more than 100 were fully employed. Numbers kept themselves alive by collecting nettles and boiling them. Some were entirely without food every alternate day, and many had but one meal in the day and that a poor one.[2]

Our last stage is Burnley, where the weavers—to quote again from Dr. Cook Taylor—'were haggard with famine, their eyes rolling with that fierce and uneasy expression common to maniacs. "We do not want charity," they

[1] *Hand-loom Weavers' Commission, Assistant-Commissioner's Report*, Part III, p. 551.

[2] *Anti-bread Tax Circular*, No. 91, June 16, 1842.

said, " but employment." I found them all Chartists, but with this difference, that the block-printers and hand-loom weavers united to their Chartism a hatred of machinery which was far from being shared by the factory operatives.'

What a comment on England's industrial supremacy—England with her virtual monopoly of large-scale manufacture in Europe! It must have been a puzzle, too, for the Poor Law Commissioners, who were then building workhouses in these parts for the purpose of depauperizing hand-loom weavers on the less eligibility principle.

But how was it, with such a Poor Law, that the hand-loom weavers did not die of starvation by the thousand? If we enter a cotton mill we shall see why. Within these gaunt walls, which are illumined at night by sputtering gas-light, the factory children work, earning twice as much as their parents, who were too old and too respectable to become factory hands.

By this time, perhaps, it is evening, but this matters nothing to the ' melancholy mad engines ', which feed on water or burning coals. The young people will still be there, with eight hours work to their credit and more to do—' kept to work by being spoken to or by a little chastisement '.[1]

' I have seen them fall asleep,' said an over-looker in 1833, ' and they have been performing their work with their hands while they were asleep, after the Billy had stopped. Put to bed with supper in their hands, they were clasping it next morning, when their parents dragged them out of bed. Half asleep they stumbled or were carried to the mill, to begin again the ceaseless round.'

' It keeps them out of mischief ', said the opponents of shorter hours. Besides, the conditions were no worse than any other industries! Factory work, however, as

[1] *First Report of the Factory Commissioners*, 1833, p. 27.

the doctors show, was different from work in the mines. The heat and confinement of the mill caused precocious sexual development, whilst in the mines the result of exaggerated muscular development was to delay maturity.

In 1842 conditions are better than they were in 1833—thanks to the factory inspectors. There is little positive cruelty, and the sight of deformity—enlarged ankle bones, bow legs, and knock knees, caused by excessive standing as a child—is rare. The problem now is one of industrial fatigue. The children are 'sick-tired'.

5. The Midlands of Leicestershire, Notts. and Derbyshire are a region of red bricks and pantiles, dotted over valleys of exquisite green. So let us leave the smoke of Lancashire and hover here for a while. Here dwell the stocking workers or frame-work knitters—the people who knit on frames stockings, gloves, and other articles of hosiery. It does not look like a region of industry. There are only a few towns, such as Nottingham, Leicester, and Loughborough; and except for a few lace factories in Nottingham, large buildings are rare. The town knitters either work in their own homes or in shops with standings for perhaps as many as fifty frames. In the villages the knitting is nearly all done in the cottages, opposite long low windows, or in a small out-house which might well be a fowl-house.

But in the streets of Leicester we can see 'life' of a sort. We can watch the procession to the pawnbrokers. Some of the knitters pawn their blankets for the day, and most lodge their Sunday clothing during the week. Says a Leicester pawnbroker:

'We regularly pay away from £40 to £50 (to some 300 persons) every Monday morning or on the Tuesday. They will, perhaps, wash on the Monday and get their linen clean preparatory to the next Sunday, and in the

course of the week they bring all the linen things they can spare. Friday is the worst; they will then bring their small trifling articles, such as are scarcely worth a penny, and we lend on them, to enable them to buy a bit of meat or a few trifles for dinner.'[1]

They are too poor to indulge in church-going or alcohol. They have no clothes to go to church in. Their publican is the druggist, where they buy opium for themselves and Godfrey's cordial, a preparation from laudanum, for their children. In the whole of Leicester, with its population of 50,000, there are but nine gin-houses. And only on Sundays do they get a bit of schooling. 'We have only one bit of a cover lid to cover the five of us in winter, . . . we are all obliged to sleep in one bed.'[2]

A frame smith, making his usual inspection of hosiers' frames at workmen's dwellings in Nottingham, after thus spending a fortnight, found his health had begun to suffer from the squalid wretchedness of their abodes. Thinking to improve it, he went on the same errand into the country, but found the frame-work knitters there in a still more deplorable state. From the bad air and other distressing influences in their condition and that of their dwellings, in another fortnight he returned, too ill to attend to his business for some weeks afterwards. This occurred in 1843.[3]

Nottingham, however, with its up-to-date lace trade was usually better off than this. The lace factories, like the cotton mills in Lancashire, eased the position of the hand-workers. In Leicestershire the knitters had no such alternative. The more their earnings were reduced, the more helplessly they were bound to their only trade.

[1] *Report of Commissioner on the Condition of the Framework Knitters* (1845), p. 109. [2] Ibid., p. 115.

[3] William Felkin, *History of the Machine-wrought Hosiery and Lace Manufactures* (1867), p. 458.

6. 1842 is a long while ago! Let us go to sleep for thirty years and wake up in 1871, when the Truck Commissioners are publishing their report.

West of Birmingham lies the black country, an area of some twenty square miles. Here, if we have read the evidence of the Truck Commissioners, we can interpret a dumb-show in Dudley, where the nail-makers dwell.

On Monday mornings the nail-maker emerges from a small hovel containing a smithy and walks into Dudley to call on a gentleman known as a fogger, a petty-fogger if he is a middleman, a market-fogger if he is a master. The nailer comes out with a bundle of metal which he takes to a second house and changes for a second bundle of metal, and with this he walks away. (The next nailer, not so lucky, hangs about till Wednesday morning, waiting for his metal.) On Saturday the nailer comes back with his nails, enters the fogger's shop, and emerges with 12*s.* in his hand. But he does not go home. He slips into a shop close by and parts company with the shillings. In return he gets a parcel, the contents of which are obviously displeasing to him. What has happened?

The nailer is a Government servant. But the Government only employs him indirectly. It puts out contracts for rivets and nails to contractors who sublet their contract, so that the work reaches the nailer at third or fourth hand. The Government, in the interest of public economy (Victorian England is famous for retrenchment), gives its contract to the lowest tenderer; and the policy of the lowest tender is responsible for the dumb-show we have watched.

To begin with, the nailer gets metal which does not suit him, so he has to change it, and this he does at the price of 2*d.* per 10*d.* bundle, at a metal changers, a relative of the fogger. (His friend who has to wait till Wednesday

for his bundle is kept idling about in order that he may drink what is left of last week's earnings at a 'wobble shop' which is owned by yet another branch of the family of fogger.)

When the nailer and his family have worked fourteen hours a day throughout the week, the nailer returns on Saturday with the nails, and receives 12*s.* for them. These shillings he takes to the fogger's store and exchanges for tea and other articles. The shillings are 'nimble'; we commend the rapidity of their circulation to Mr. Irving Fisher. A fogger who pays out the shillings from his warehouse receives them back again in a few minutes over the counter of his store. 'He will perhaps reckon with seven or eight at one time, and when he has reckoned with them, and perhaps paid them six, seven, or eight pounds, he will wait until they have gone to the shop and taken the money there as they leave the warehouse. Then he goes into the shop himself for it, as he cannot go on paying without it.'[1]

But surely this is truck! Certainly not. There may be 'fearful cheating' with tea, but the nailer is not bound to go there. He is perfectly free. The only trouble is this: it is a case of tea or no work the week following. This is why, despite the Truck Act of 1831 and despite the known existence of the abuse, these practices are rife among the nailers as late as 1871, the year in which the Truck Commissioners issued the Report from which this scene is compiled. The plight of the nailers is not the plight of factory operatives or miners; it is the plight of the frame-work knitters, of men who are bound by the intangible fetters of economic need to the uncontrollable devil of 'semi-capitalism'.

[1] *Evidence before the Truck Commissioners* (1871), Q. 37,500.

## 2. Mining Operations

1. Coal was king of the nineteenth century. The first steam-engine was built to pump water out of coal mines, the first canal was cut to carry the Duke of Bridgwater's coal from Worsley to Manchester. The first railroads were laid around Newcastle to convey the coals from the pit mouth to the river. George Stephenson, the inventor of the locomotive, began life as a trapper on a Tyneside colliery.

Where would English industry have been without its king? In 1780 (in round figures) 5,000,000 tons of coal were raised in the United Kingdom: in 1800, 10,000,000; in 1865, 100,000,000; and in 1897, 200,000,000. Coal enticed the cotton factories from the dales of the Pennines to the moist lowlands of West Lancashire. At every stage of their work the iron-makers depended on coal; and the great inventions in the iron and steel industry are land-marks in the expansion of the demand for coal—Cort's puddling process 1783, Watt's steam-engine 1785, Neilson's hot blast 1824, Naysmith's steam-hammer 1835, Bessemer's steel-converter 1855, Siemen's open hearth 1870, Thomas' basic process for the treatment of highly phosphoric ores 1878. The steamship, a novelty in 1820, ruled the seas in 1870; and ironclads followed steamships. The smokeless steam-coal of South Wales guarded the heritage of Trafalgar. By the end of the nineteenth century, coaling stations were an important item in international politics.

Meanwhile, the people of England, heedless of Malthusian forebodings, multiplied exceedingly. They lighted their streets and buildings with coal-gas, and burnt coal in their grates. With coal they paid for the food and raw materials from other lands. Imports of food and raw materials were offset by exports of coal and of

textiles and hardware produced by coal. The spirit of invention has pushed on to electricity and oil, but coal is still the pivot of English industry and commerce. And therefore, seeing that coal has meant all this to England, let us look at the men who raised the coal. How did they live, what did they think about, what did they count for then, what do they count for now?

2. In 1800 the miners stood for nothing in the nation's life. In Scotland they had just been emancipated from the status of villeinage. In Northumberland and Durham they were tied by yearly bonds. Elsewhere they were weak and isolated. In 1825 a 'Voice from the coal mines of the Tyne and Wear' cried: 'While working men in general are making 20s. to 30s. per week (*sic*) the pitmen here are only making 13s. 6*d*. and from this miserable pittance deductions are made.'[1]

In 1839, during the Chartist disturbances, a Welsh M.P. wrote to the Home Secretary begging for barracks and troops: 'A more lawless set of men than the colliers and miners do not exist . . . it requires some courage to live among such a set of savages.'[2] When the miners came out in 1844, there were thousands of cottages tenantless in Northumberland and Durham. For the colliery proprietors owned the cottages, and when the miners struck evicted them. So the miners set up house in the streets. 'In one lane . . . a complete new village was built, chests-of-drawers, deck beds, &c., formed the walls of the new dwelling; and the top covered with canvas or bed-clothes as the case might be.'[3] Yet, for all their griminess, they had human hearts and voices. During the

[1] Pamphlet of 1825, p. 14.

[2] *Home Office Papers*, 40, Letter from R. J. Blewitt, Esq., M.P., November 6, 1839.

[3] Richard Fynes, *Miners of Northumberland and Durham*, p. 72

strike they obtained permission to hold a meeting at Newcastle; and the wealthy citizens who made their fortunes out of the coal trade trembled before the invasion of black barbarians. But the meeting passed off in rain and peace. Thirty thousand miners marched in procession, 'for near a mile flags in breeze, men walking in perfect order'; and as they marched, they sang, as only miners sing, songs and hymns and topical ditties:

'Stand fast to your Union
Brave sons of the mine,
And we'll conquer the tyrants
Of Tees, Wear, and Tyne!'

Up and down the Durham coalfields tramped a misguided agitator (in after life the veteran servant of the Durham Miners' Association), by name Tommy Ramsey. With bills under his arm and crake in hand, he went from house-row to house-row calling the miners out. He had only one message:

'Lads, unite and better your condition.
When eggs are scarce, eggs are dear;
When men are scarce, men are dear.'[1]

Such blasphemy appalled the Government's Commissioners. But the miners had a zest for religion as well as for strikes. During the strike of 1844, 'frequent meetings were held in their chapels (in general those of the Primitive Methodists or Ranters as they are commonly called in that part of the country), where prayers were publicly offered up for the successful result of the strike.' They attended their prayer meeting 'to get their faith strengthened'.[2]

[1] John Wilson, *History of the Durham Miners' Association* (1870–1904), p. 40.

[2] *Report of Commissioner on the State of the Mining Population* (1846).

Such ignorance could only be cured by education. Some worthy members of society had already recognized the fact. In 1830 a Cardiff 'Society for the improvement of the working population in the county of Glamorgan' issued improving pamphlets:

No. 9. Population, or Patty's Marriage.

No. 10. The Poor's Rate, or the Treacherous Friend.

No. 11. Foreign Trade, or the Wedding Gown.[1]

But the northern miners were perverse people. In Scotland, according to one Wesleyan minister,[2] the miners read Adam Smith. In Northumberland, with still greater perversity, they preferred Plato. 'A translation of Plato's *Ideal Republic* is much read among those classes, principally for the socialism and unionism it contains; in pure ignorance, of course, that Plato himself subsequently modified his principles and that Aristotle showed their fallacy.'[3]

3. The Royal Commission of 1842 on the Employment and Condition of Children and Young Persons in Mines disclosed facts which made Cobdenite England gasp. The worst evidence came from Lancashire, Cheshire, the West Riding of Yorkshire, East Scotland, and South Wales. In these districts juvenile labour was cheap and plentiful; and this was an irresistible argument for its employment, though the miners themselves disliked it. The meddlesome restrictions on the factories were a contributory cause. Parents, it was said in Lancashire, were pushing their children into colliery employment at an earlier age because of the legal restrictions upon sending them to the neighbouring factories.

[1] These pamphlets are in the British Museum.

[2] *Report of Commissioner on the State of the Mining Population* (1850).

[3] Ibid. (1852).

A Lancashire woman said in evidence :

'I have a belt round my waist and a chain passing between my legs, and I go on my hands and feet. . . The pit is very wet where I work and the water comes over our clog tops always, and I have seen it up to my thighs . . . I have drawn till I have had the skin off me ; the belt and chain is worse when we are in the family way.' [1]

The children's office was a lonesome one. Children hate the dark, but being little they fitted into a niche, and so they were used to open and close the trap-doors. A trapper lad from the county of Monmouth, William Richards, aged seven-and-a-half, said in evidence :

'I been down about three years. When I first went down, I could not keep my eyes open ; I don't fall asleep now ; I smokes my pipe, smokes half a quartern a week.' [2]

Except in the northern mining districts, where there were good day and Sunday schools and Methodism was powerful, a pagan darkness prevailed. As a Derbyshire witness put it :

'When the boys have been beaten, knocked about, and covered with sludge all the week, they want to be in bed all day to rest on Sunday.' [3]

In the hope of startling a religiously-minded England, the Commissioners reproduced examples of working class ignorance. James Taylor, aged eleven,

'Has heard of hell in the pit, when the men swore ; has never heard of Jesus Christ ; has never heard of God ; he has heard the men in the pit say, " God damn thee ".'

[1] *Royal Commission, First Report* (*Mines*), p. 27.

[2] Ibid., p. 21.

[3] *Royal Commission, Second Report* (*Trades and Manufactures*), p. 147

A Yorkshire girl, aged eighteen, said :

'' I do not know who Jesus Christ was ; I never saw him, but I have seen Foster, who prays about him.'[1]

4. Just as in the East Midlands the frame-work knitters worked for middlemen or master middlemen, and just as the Dudley nailers worked for petty-foggers and market-foggers, so too the Staffordshire miners worked for ' butties '. Here again the workers were exposed to the petty tyrannies of semi-capitalism ; and here again the middlemen, in this case the butties, incurred the odium of a system for which their superiors, the coal-owners and coal-masters, were responsible.

Why the butty system prevailed in the Midlands—and in a modified form it prevails to-day—is not clear. In some places it seems to be connected with the smallness of the mining concerns or of the metal trades which they supplied. In South Staffordshire a contributing factor was the ancient and allied industry of nail-making.

The conditions in South Staffordshire in 1843 are fully described in the Midland Mining Commission of that year.

The butty was a contractor who engaged with the proprietor or lessee of the mine to deliver the coal or iron-stone at so much per ton, himself hiring the labourers, using his own horses, and supplying the tools requisite for the working of the mine. The contract price was known as the ' charter price ' or ' charter '. Thus by a freak of language the Staffordshire miner knew by the same word the ' butty's charter ' which was the symbol of his oppression, and the ' people's charter ' which was the goal of his desire.

' The butties ', said the miners and their wives, ' are the devil : they are negro drivers : they play the vengeance

[1] Ibid., pp. 155–6.

with the men.'[1] The men kicked when, after working a couple of hours, they were fetched up, without pay, on the excuse that there were no waggons to take away the coal. But the butty comforted them with a bottle of pit drink, and all was smooth again.

A collier related a case where 'a pike man had worked only one half-day in the week and got 2*s*. for it, and because he did not spend 6*d*. of this at the butty's shop, the latter told the doggy (the under man) to let the man play for it.'[2]

The miners recognized that often the butty was not to blame. In the district north and east of Dudley, the butties got their 'charter price' from the coal-owners in the form of tickets on the coal-owners' truck-shop. What else could they do but hand them on to the men? 'He used to be a very good butty,' said one miner's wife, 'till they haggled him and dropped his "charter", so that he cannot pay his men.'[3]

West and south of Dudley the butties, though they did not truck their men, kept public-houses; and being employer and publican in one, they had a tight hold on the men.

Was the compulsion to drink an oppression? To our minds, yes; as also to the minds of the teetotal Chartists whom the Government imprisoned, and of the strike leaders whom the Government's Commissioners denounced. But to the majority of the miners the abundance of beer was a delight. They objected to the butty's bullying, but they loved his beer, especially the feckless ones, for when wives were importunate the drunkards pleaded necessity.

However, all the beer-drinking could not be charged to the butties. The miners themselves, in their own fellow-

[1] *Midland Mining Commission, First Report*, p. 34.
[2] Ibid., p. 91. [3] Ibid., p. 44.

ships, were devoted to it ; and the compulsion of friends was as severe as the compulsion of butties. Every approach to recreation, every act of mutual providence against accident or disease, began and ended in beer. The day a man entered the pit's company, he paid 1*s.* for footing-ale, and the doggy saw that no churl escaped. When a lad was old enough to have a sweetheart he was toasted with the 'nasty' shilling. The sins of the married men were washed away in half-a-crown's worth of ale. The beer-shop was the head-quarters of the Burial and Savings Clubs. The first charge on a Burial Club was a good oak coffin, the second charge drinks for the pall-bearers, and then a glass or two for the rest of the company.

They had lotteries to which each man contributed 20 fortnightly shillings. Each week a name was drawn, and the lucky man stood a feast ; while every member, in addition to a shilling for the box, produced 6*d.* for drinks.

In all these festivities the butty was in the offing. When they would have him he presided ; and so at his worst an obnoxious bully, at his best he was an accommodating landlord.

Direct employment, such as prevailed in the north of England, would have averted much of this evil. There were no structural difficulties in the way of change. Direct employment would not have meant a change to another class of work (this is what direct employment meant for knitters and hand-loom weavers). The butty system existed and persisted through slackness and irresponsibility. The owners paid compensation for accidents, when they might have diminished the number of accidents. They paid commissions to middlemen with whom they might have dispensed. The system made temperance impossible for the individual ; and the

masters, with the full approval of the Government, did their best to destroy the 'pernicious combinations' by which alone a standard of sober decency could be promoted.

5. The Report of the Truck Commissioners (1871–2) enables us to complete the picture. It also enables us to understand why, at this late day, truck was still rife in certain districts.

Truck and Tommy, truck-shop and Tommy-shop, are convertible terms. Truck is from the French 'troc' = barter. Cobbett tells us how the word 'Tommy' was used. In his soldiering days the rations of brown bread, 'for what reason God knows', went by the name of Tommy. 'When the soldiers came to have bread served out to them in the several towns in England, the name of Tommy went down by tradition, and, doubtless, it was taken up and adapted to the truck-system in Staffordshire and elsewhere.'[1] From the textile districts it had all but disappeared in 1871. When the cotton manufactures went to outlying dales for water power, they were almost compelled to open stores for their work-people. Owen's store at New Lanark was, in effect, a well-managed truck-shop; and the Truck Commissioners of 1871 reported that the New Lanark Company of that day was breaking the law. But when the cotton industry was gathered in the towns, the need for company stores ceased. Consequently, after the passing of the Act of 1831, which prohibited truck altogether, the masters very generally abolished the stores of their own accord; and survivals were jealously watched.

A collection of Factory Scraps, preserved at the Goldsmiths' Library in London, contains a copy of the Factory

[1] *Rural Rides*, ii. 353.

Bill of 1833, with some pencil notes in Ostler's handwriting which run :

*Cragg Dale Facts*

*Truck System :* Little altered : men knew they were imposed. They pay in money now—but compel them to buy at their own shops. . . Wholesale warehouses at Rochdale say, ' Oh ! put it sideways : it will do for Cragg Dale masters to sell among their people.'

*Song :* ' Lousy butter and burnt bread.'

About 1842 a curious perversion of truck was prevalent in parts of Yorkshire. The trade depression in the Bradford district tempted disreputable woollen manufacturers to force on their operatives the products of the factory as part payment of wages. Combers were given pieces of cloth, workers in shoddy mills bundles of rags. But this utterly inexcusable fraud, no less than its more specious complement, the employer's store, was rooted out by inspectors and factory reformers. Therefore in 1854 the Government's Commissioner was able to say that in a factory district like Lancashire truck was not only non-existent but ' impossible '.[1]

He was right as to the factory districts, but not quite right as to Lancashire. In Prescot, a small Lancashire town on the fringe of the factory district, the watchmakers in 1871 were being paid in watches. The masters alleged that they only gave watches to the workers when the latter had orders for them, but the evidence showed that these orders only came to hand when the men were asking for fresh work. The pawnbrokers explained what happened. ' Watches ', said a pawnbroker's clerk, ' pass from hand to hand as a circulating medium until they get very low in the market and are

[1] *Commons Committee, Stoppage of Wages* (*Hosiery*, 1854). Evidence of Mr. Tremenheere.

pawned.'[1] The pawnshop in question had 700 watches on pledge, most of them belonging to workmen in the town.

In railway contracting truck was prevalent in the forties. In roving employment of this type it is difficult to see how some form of contractor's shop could have been avoided. The navvy needed canteens or Y.M.C.A. huts, but such things had not been thought of then. However, when the big period of railway construction came to an end, the question lost its importance.

South Staffordshire and the Black Country were the ancient strongholds of truck. The campaigns against truck originated here. The nailers, the cash-paying masters, and the respectable ratepayers joined together to promote the Truck Act of 1820. Lord Hatherton, a Staffordshire nobleman, after three years hammering at the House of Commons, obtained the Truck Act of 1831. But in 1843, the year of the Midland Mining Commission, truck was still rife in the coalfields. The well-known Tommy-shop scene in Disraeli's novel *Sybil*, which was published in 1845, is taken direct from the Commissioners' Report. Diggs, the butty of the novel, is Banks, the coal proprietor of the Report. In the novel the people say of Master Joseph Diggs, the son: 'He do swear at the women, when they rush in for the first turn, most fearful; they do say he 's a shocking little dog.' In the Report, page 93, the miner's wife says: 'He swears at the women when the women are trying to crush in. He is a shocking little dog.' One touch is Disraeli's own. He makes the miners keen to purchase 'the young Queen's picture'. 'If the Queen would do something for us poor men, it would be a blessed job.' In the Report there is nothing about this, but there is a section dealing with Chartism.

[1] *Evidence before the Truck Commissioners*, Q. 33,670

However, the truck-shop was gradually disappearing. Every year it became easier to expose evasions, and in good times the workers used their prosperity to slip away from the Company store. In 1850 a final campaign was initiated by five local Anti-Truck Associations, backed by the National Miners' Association under Alexander MacDonald. Truck-masters were prosecuted and truck was steadily dislodged from the coalfields and adjacent ironworks. Only in the nail trade did it survive, for the reason that the complete subjection of the nailers made it possible to practise the essentials of truck without a formal violation of the law.

In the remaining colliery districts in 1871 truck was prevalent only in West Scotland and South Wales.

In West Scotland it was yielding ground before the pressure of the unions. The companies only maintained it by active coercion. If a miner held out for money, they had to yield; and if they were malicious, they marked him as a sloper and dismissed him the first when a depression came. 'Black lists', said the Truck Commissioners, 'are often kept of slopers; threats of dismissal were repeatedly proved; and cases of actual dismissal for not dealing at the store are not rare.'[1] However, the masters themselves were getting tired of it, since it led so frequently to strikes.

Truck in South Staffordshire was bound up with the butty system; in railway construction with the system of contracting and sub-contracting, and similarly in South Wales, as also in the west of Scotland, it was bound up with and dependent on the system of long pays. In order to carry on from one pay day to the next, the men got advances on the company's store. In this way many lived permanently ahead of their wages. The thriftless and drunkards were always 'advance men,

[1] *Truck Commission*, 1871. *Report*, p. 16.

but the provident miners hated it and only dealt there on compulsion '.

The Commissioners drew a vivid picture of Turn Book morning in South Wales at the close of the pay month.

At 1 or 2 a.m. the women and children begin to arrive with their Advance Books. Perhaps one hundred would be there, wet or fine, sleeping on the doorsteps or singing ballads until morning.

At 5.30 a.m. the doors opened, and the waiters made a rush for the counter. Advance Books were produced, and goods handed over up to the amount of wages which would shortly fall due. Women took their pick of the articles, groceries, tobacco, occasionally a few shillings.

' It is quite usual ', say the Commissioners, ' for shoemakers and other small tradesmen in the neighbourhood of Abersychan to be paid by the workmen in goods. . . Tobacco in several districts of South Wales has become nothing less than a circulating medium. It is bought by the men and resold by them for drink, and finds its way back again to some of the Company's shops. Packets of tobacco pass unopened from hand to hand. An Ebbw Vale grocer who took the Company's tobacco at a discount declared : " For years, when they were selling it for 1*s.* 4*d.* a lb. I used to give 1*s.* ; but I was so much over-flooded with it that I was obliged to reduce the price to 11*d.* That would not do still, and I had to reduce it to 10*d.* I told the men to take it to some other shop if they could get 11*d.* or 1*s.* for it. I was obliged to do that many a time, in order to get rid of the large stocks I held in hand. Tobacco will not keep for many months without getting worse." '

Weekly pays, therefore, were the constant demand of the miners' unions. In Northumberland and Durham, whence truck had disappeared long ago, pays were fortnightly, and the only objection advanced by the owners against weekly pays was the practical inconvenience of the pressure on the pay staff. In the North of England

Iron Trade, weekly pays, the Commissioners found, had just been introduced. In West Scotland some of the coal-owners were trying to recoup themselves for the loss of their truck-shop by charging poundage on the men's wages. But this dodge, like the bigger grievance of truck, was stoutly resisted by the local union. Indeed, in one coalfield after another the disappearance of truck and kindred evils coincides with the appearance of strong County Unions.

6. We are given to understand that the miners of South Wales insist on economics written by sound labour men. We therefore offer them a few suggestions for a history of the currency in the nineteenth century from the worker's point of view.

i. In 1800 London relied for small coin on private enterprise. Every week the Jews' boys collected from the shopkeepers their bad shillings, buying them at a heavy discount, with serviceable copper coin forged in Birmingham (*vide* Patrick Colquhoun, *A Treatise on the Police of the Metropolis*, 1800, Chapter VII). The resumption of cash payments in 1819 was injurious; for owing to the shortage of small coin, the wage-earners were paid in bulk with large notes, which they had to split at the nearest public-house. The Truck Act of 1831 prohibited wage-payments in notes on Banks more than 15 miles distant, but said nothing about cheques—an oversight which the capitalists repeated in their Bank Act of 1844.

ii. The general dissatisfaction with the state of the currency led to attempts to dispense with coin. About 1830 Labour Exchanges were opened in London for the exchange of goods against time notes, representing one or more hours of labour. The originator was Robert Owen, and the failure of the Exchanges was probably due to the fact that Owen was at heart

a capitalist. The National Equitable Labour Exchange at one time was doing a business of over 20,000 hours per week, but very shortly after this, the President (Owen) had to report a serious deficiency of hours, many thousands having been mislaid or stolen. The Exchange in consequence had to close its doors.

iii. In the 'forties the centre of interest is the Midlands, and the period may be termed the Staffordshire or beer period. The currency was very popular and highly liquid, but it was issued to excess and difficult to store. More solid surrogates were therefore tried. A Bilston pawnbroker[1] said that he had in pawn numerous batches of flour, which the men's wives had brought from the Truck Shops and turned into money, in order to pay their house-rents. Flour, however, was not so hard as a Prescot watch.

iv. We come next to the Welsh or Tobacco period, when the currency was easily transferable, but liable to deterioration.

v. Finally, in the last quarter of the nineteenth century, the world of labour attained to a cash basis, and there was no Cobbett to denounce the resumption.

We shall not be guilty of serious exaggeration if we preface our history with the motto :

'*In the nineteenth century the Trade Unions and the Trade Unions alone made the nominal earnings of the working man a cash reality.*'

### 3. The Spirit of Association

1. The student of Dicey's Law and Opinion in England is invited to distinguish three periods :

i. The period of old Toryism or legislative quiescence (1800–38).

[1] *Commons Committee, Stoppage of Wages in the Hosiery Manufacture* (1854), Q. 80.

ii. The period of Benthamism or individualism (1825–70).

iii. The period of collectivism (1865–1900).

Bentham lived during the first period and his name is rightly given to the second period.

The student, therefore, comes to wonder if there is anything which is not Benthamism. Benthamism, he says to himself, stands for individualism. How then can the period of Benthamism include the humanitarian legislation which begins with the first Factory Act of 1802 and broadens out during the middle of the century into the elaborate code regulating from then onwards the conditions of employment in workshops, factories, and mines? How can a monster beget an angel?

We may perhaps throw light on this difficulty by suggesting that the *social* trend from 1825–70 cannot be compressed into a single word. Individualism may suffice to define the dominant *legal* trend, but it conceals the influence exerted on the legislature from without and from below by the action of voluntary associations. The period of voluntary association coincides with and overlaps the period of individualism.

2. What Bentham was to individualism, Robert Owen was to voluntary association. Bentham himself was an admirer of Owen and supported his philanthropy, but, as expressions of a social attitude, Benthamism and Owenism were poles asunder. The contrast between the two is admirably displayed in the evidence given before the Factory Committee of 1816 by two representatives of the employing class, Josiah Wedgwood of pottery fame and Robert Owen himself.

'In the state of society,' said Wedgwood, 'in which there is evidently a progressive movement, it is much better to leave things as they are than to attempt to

amend the general state of things in detail. The only safe way of securing the comfort of any people is to leave them at liberty to make the best use of their time, and to allow them to appropriate their earnings in such way as they think fit.'[1]

Robert Owen thought otherwise. In a couple of answers he exposed the fallacy of enlightened self-interest. They seem obvious enough to-day, but in 1816 they were the voice of one crying in the wilderness. He was asked whether he believed that 'there is that want of affection and feeling on the part of parents, that would induce them to exact from their children more labour than they could perform without injury to their health;' and he replied:

'I do not imagine that there is the smallest difference between the general affection of the lower order of the people, except with regard to that which may be produced by the different circumstances in which they are placed.'[2]

Another question was: 'Do you conceive that it is not injurious to the manufacturer to hazard, by overwork, the health of the people so employed?' He replied:

'If those persons were purchased by the manufacturers I should say decisively, yes; but as they are not purchased by the manufacturer and the country must bear all the loss of their strength and their energy, it does not appear, at first sight, to be the interest of the manufacturer to do so.'[3]

Owen had grasped the meaning of social responsibility, and he devoted his life to social service. But he was too wayward to observe the conventions of society, and passed beyond the social pale. The factory reformer became the Socialist. Whether his disciples comprehended his

[1] *Commons Committee of* 1816, pp. 64 and 73.
[2] Ibid., p. 38.
[3] Ibid., p. 28.

philosophy we may doubt, but he understood better than any one else their instinct for association, and he gratified it.

It is not contended that Owen was responsible for all the associative effort of his generation; for with political and religious associations he had no sympathy. But the spirit which infected him infected others after him, rousing them to associate now for this, and now for that social or religious or political purpose.

3. We may divide associations for social purposes into two classes.

To the first class belong associations formed to secure the abolition of some abuse. These naturally disappear when their object is attained.

For example, there was the Anti-slavery Campaign in which Joseph Sturge and other Quakers played so prominent a part. By an organized crusade of political education the Abolitionists induced an originally hostile Parliament to emancipate the West Indian negroes in 1833, and to shorten the period of semi-servile apprenticeship in 1838. Yorkshire was the home of the Short Time Committees, which organized the campaign against White Slavery at home. The Ten Hours Movement caused the Ten Hours Bill to become the law of the land. From Lancashire came the Anti-Corn Law League, whose story is told in another chapter.

The second class of association was the association for economic betterment—the Friendly Society, the Co-operative Society, the Trade Union. Conceived in enthusiasm and self-inspired, these associations asked only of the State a legal framework in which to develop, but they did not win it without struggle and delay.

The Government was anxious to encourage thrift, but the development of the Friendly Societies was impeded

for a time by legislation aimed at political conspiracy. The Corresponding Societies Act of 1799 prevented the Friendly Societies from forming a central organization with branches, and the Dorchester Labourers of 1834 discovered the peril into which the ritual of oaths might lead innocent men.

These deterrents were removed by enabling legislation. In 1829 a central authority, the Registrar of Friendly Societies, was appointed to supervise Friendly Societies, and between 1829 and 1875 further privileges and safeguards were conferred. But the Friendly Society Movement throughout the nineteenth century was wholly voluntary. In 1911 the situation was suddenly reversed by the passing of the National Insurance Act.

The Co-operative Societies were more suspect. They crept into legal recognition as the children of the Friendly Society, under the 'frugal investments' clause of the Act of 1846, being compelled by the legal prejudice against association in restraint of trade to adopt this unnatural mother. Their real nature was recognized in 1852, when they were brought under the Industrial and Provident Societies Act, and in 1862, when they were granted the boon of limited liability. But the accident of their legal origin still survives; for they are regulated to-day by the Industrial and Provident Societies Act of 1893. The Co-operative Movement is now drawing closer to politics, following the lead of most of the continental countries, notably Belgium and Germany. Though we cannot say that there is any indication of the State taking over the movement, we may note that the growth of municipal trading in the 'nineties was, in principle, an application of the consumers' association to monopolies of distribution such as tramways, water, electricity, and gas.

The State was altogether hostile to the growth of the

Trade Union. The Charter of Emancipation, won by the guile of Francis Place in 1824, was severely curtailed in 1825. Huskisson[1] depicted in lurid terms the tyranny of a military trades unionism, 'representing a systematic union of the workers of many different trades'. It was a 'kind of federal republic', whose mischievous operations, if not checked, would keep the commercial classes 'in constant anxiety and fear about their interests and property'. Arnold, of Rugby, a decade later wrote of them in the same strain: 'you have heard, I doubt not, of the trades unions; a fearful engine of mischief, ready to riot or assassinate; and I see no counteracting power.'[2]

The counteracting power was their own weakness. The early militancy burnt itself out, and was succeeded at the turn of the century by a 'New Spirit and a New Model'. The new spirit was anti-militant, and the new model was a trade union representing the *élite* of the skilled trades. The Amalgamated Society of Engineers was founded in 1850 and served as a model to the Carpenters, Tailors, Compositors, Iron-founders, Bricklayers, and others. The Trades Unions were now respectable, and in 1867 the State recognized the fact.

The period of collectivism is denoted by the growth of the Labour Party in Parliament, and the increasing part played by the State in industrial disputes and the regulation of wages. The nationalization of railways and the nationalization of mines are burning questions.

4. In all the movements we have described, the spiritual stimulus, the initial drive, and the solid successes have been provided by voluntary association. The State has not been the pioneer of social reform. Such a notion is

[1] Speech, March 29, 1825.

[2] Letter to the Chevalier Bunsen, 1834, quoted in Strachey, *Eminent Victorians*, p. 197.

the mirage of politicians. It has merely registered the insistent demands of organized voluntary effort or given legal recognition to accomplished facts. This is the distinctive note of English social development in the nineteenth century.

### For Reference

Dicey, *Law and Opinion.*
Robinson, *The Spirit of Association.*
Hovell, *The Chartist Movement.*
Sombart (tr. Epstein), *Socialism and the Socialist Movement.*
[Cd. 9236], *Report of Committee on Trusts.*

# VIII

# ATOMIC THEORIES

Professor W. H. Bragg, C.B.E., D.Sc., F.R.S.

When a lecture on the progress of Science is given before a conference concerned largely with historical subjects, it is not inappropriate to point out that Science has a history of its own and that its progress makes a connected story. The discovery of new facts is not made in an isolated fashion, nor is it a matter of pure chance, unaffected by what has gone before. On the contrary, scientific progress is made step by step, each new point that is reached forming a basis for further advances. Even the direction of discovery is not entirely in the explorer's control; there is always a next step to be taken and a limited number of possible steps forward from which a choice can be made. The scientific discoverer has to go in the direction in which his discoveries lead him. When discoveries have been made it is possible to think of uses to which they may be put, but in the first instance all discoveries are made without any knowledge whatever of what use may afterwards be made of them.

Consequently scientific progress is a quite orderly advance, not a spasmodic collection of facts, and in the truest sense of the word it has a history. In order that opportunities for this steady progress may be provided it is very important that this point should be fully appreciated. Every one, for example, is vaguely conscious that science played a great part in the War. As a consequence the number of students of science has greatly increased; manufacturing firms are awakening to the fact that they

must pay more attention to scientific development and are founding research laboratories. It is very important that this awakened attention should be well informed, and for that reason it cannot be pointed out too often that the scientific work which has been the basis of all material progress can only be turned to definite material ends in the last stages of its development. Fundamentally everything rests on the pure attempt to gain knowledge without any idea of the use to which it may subsequently be put. Without pure science there is no applied science at all. It is quite right in my opinion that the researcher in pure science should have with him the hope that what he does may one day be of direct benefit to others. But it is probable that he does not in his own mind confine the idea of possible uses to such material matters as I have mentioned above and as are so prominent at present. He believes that his work has a less material side whose value need not be explained to the present audience.

In the general line of progress it is natural to find that there are certain broad roads along which the main advance has been directed. Students of physics and chemistry and the subjects which are allied to them find that they are in general considering either matter, or electricity, or energy. I make this classification, not from any philosophical point of view, but simply for present convenience. The first important principle to which I would like to draw your attention is that each of these things can be measured quantitatively. If we accept the weight of a substance as an indirect measure of the amount of matter present, then we all know we can express the amount of matter in any given body in terms of a fundamental unit, like a pound or a gramme; and the idea has been put to immemorial use. In later years we have learnt that electricity itself is also a quantity and that the amount of electricity which stands on an electrified body,

or flows past a given point in an electric conductor, as for example the wire connected to an electric light, can be expressed arithmetically in terms of some unit. Instruments are made for the purpose of measuring quantities of electricity in terms of the legal standard. It is one of the functions of a Government Institution, like the National Physical Laboratory, to test such instruments and report on their accuracy. International conferences have been held for the purpose of reducing these units to as small a number as possible so that people may be able to trade less wastefully and more conveniently, so that also the barriers between peoples may be broken down and the interchange of ideas as well as of materials may be made more easily. Without an arrangement of this kind it would be impossible to carry on industrial life in which use is made of electricity. It would be as difficult as to hold a market without the use of weights and scales, more difficult, in fact, since any one can estimate the size of a piece of cloth or the amount of corn in a sack, but no one has a natural sense by which he can estimate an amount of electricity.

In just the same way energy can be measured as a quantity in terms of a fundamental unit. The discovery that this was so was made by Joule and others towards the middle of the nineteenth century, and lit the road for further advance as a dark street is lit by the sudden turning-up of the lamps. All modern industry rests on this principle. We are now so accustomed to the idea that energy is a quantity that we can hardly realize a time when it was merely a vague term. If we want an illustration of how thoroughly we have grasped this idea let us remember that when we pay our electric-light bill we pay so much money for so many units of energy supplied ; for so much energy, let us note, not for so much electricity, since we take into account not only the actual amount of

electricity driven through our house wires, but also the magnitude of the force which is there to drive it. Energy exists in many forms: energy of motion, heat, gravitational energy, chemical energy, radiation, and so on. In the transformations of energy which are continually occurring in all natural processes, there is never any change in the total amount of energy. This is the famous principle of the Conservation of Energy. Sometimes it is stated in the form 'Perpetual motion is impossible'.

One of the most important forms of energy is radiation. The constant outpouring by the sun of energy in this form is vital to us. The fact was obvious long ago and that is one of the reasons why light and heat have interested students of science in all ages.

There exist then three main subjects of study—matter, electricity, and energy. These themselves and their mutual relations have been, and are, the principal objects of interest to the scientific student, and from our strivings to understand them we have learnt most of what we know. All three are quantities and all are expressible in terms of units.

Now there is one point which I have thought would especially interest you. A very remarkable tendency of modern discovery shows more and more clearly that not only are these things quantities which we can express in units of our own choosing, but that Nature herself has already chosen units for them. The natural unit does not, of course, bear any exact connexion with our own. This being so, it must be of the utmost importance that we should know what these natural units are and so be able to understand what Nature is ready to tell us. Nature has chosen to speak in a certain language; we must get to know that language.

In the first place we know surely that there are natural units of matter. This was the great discovery made by

Dalton in the beginning of the nineteenth century. When he found that each of the known elements, such as copper or oxygen or carbon, consisted ultimately of atoms, all the atoms of any one element being alike, he laid the foundation on which the huge structure of modern chemistry has been raised. The chemist takes one or more atoms of one element, one or more of another, and may be of a third or fourth, and he puts them together into a compound which we call a molecule. The molecule for example of ordinary salt contains always one atom of chlorine and one of sodium. Chlorine and sodium are elements, salt is a compound. Six atoms of carbon and six of hydrogen put together in a certain way make benzene. In the same way every substance that we meet is capable of analysis, showing ultimately the molecules as made up, according to a definite plan, of so many atoms of the various elements. In analytical chemistry molecules are dissected in order to discover the mode of their building ; in synthetic chemistry the atoms are put together to make a molecule which is already known to have, or even may be anticipated to have, certain properties. This is the work of the chemist. Sometimes enormous forces are concerned in this pulling apart and putting together, witness the terrific power of modern explosives. But the same kind of handling by the chemist may be devoted to the delicate construction of a molecule which gives a certain colour to the dyer's vat and so pleases the eye that the great cloth industries feel the consequence, and nations themselves are affected by the flow of trade. After all, since the processes of the physical world operate ultimately through the power and properties of molecules, it is not surprising that the chemist's work in these and numberless other ways has such tremendous influence in the world.

Here then by the recognition of the units of matter

which Nature has chosen for herself it has been possible to do great things.

It should be observed that the atom, in spite of its name, is not something which is incapable of all further division ; it is only incapable of retaining its properties on division. When an atom of radium breaks down in the unique operation during which its singular properties are manifested, it dies as radium and becomes two atoms, one of helium, the other of a different and rare substance. It will interest you to know that the airships of the future are expected to be filled with this non-inflammable helium.

The discovery of the atomic nature of electricity came later. Faraday established the fact that in certain processes there was more than a hint that electricity was always present in multiples of a definite unit. In the process called electrolysis the electric current is driven across a cell full of liquid containing molecules of some substance. When the electricity passes there is a loosening of the bonds that bind together the atoms of the molecule, and a separation ; atoms of one kind travel with the electricity across the cell and are deposited where the current leaves the cell ; the other kind travel the opposite way. In this way for example we deposit silver on metal objects in electro-plating processes, or separate out the purest copper for certain electrical purposes. The striking thing which Faraday discovered was that the number of atoms deposited always bore a very simple relation to the quantity of electricity that passes. The same current passing in succession through cells containing different kinds of molecules broke up the same number of molecules in each cell. It was as if in each electrolytic cell atoms of matter and atoms of electricity travelled together. The movement of an atom meant the simultaneous movement of a definite quantity of electricity. Electricity was, so to

speak, done up in little equal parcels, and an atom of matter on the move, which was termed an ion, or wanderer, carried, not a vaguely defined amount of electricity, but one of these definite parcels.

It was not, however, until the later years of the nineteenth century that the natural unit of electricity was manifested by itself and without a carrier. At a famous address to the British Association at York in 1881 Sir William Crookes described the first marvellous experiments in which this feat had been accomplished, though there was still to come a long controversy before the interpretation was clearly accepted. It is now definitely established that there is a fundamental atom of electricity which we now call the electron. As we all know electrification is of two kinds—a positive and a negative. The electron is of the negative kind. There does not appear to be a corresponding positive atom of electricity, or at least not one that is so singular in its properties as the electron. Electrons go to the making of all atoms, just as atoms go to the making of molecules. The atom which is neutral, that is, shows neither positive nor negative electrification, must contain positive electricity in some form to balance the electrons which we know it contains. When we strip an atom, as we know how to do, of one or more of these electrons, the remainder is positively charged. The positive ion is any sort of an atom or molecule which has become positively electrified in this way. An atom which has become positive by the loss of one or more of its electrons exercises a force on any spare electrons in its neighbourhood or on any atom carrying a spare electron. When there are large numbers of atoms seeking in this way to become neutral once more, as occurs often in Nature, the forces generated may be tremendous. They are shown, for example, in the lightning-stroke. But indeed it would seem that all the chemical forces of which

we have already spoken depend ultimately upon the electric state of the atom concerned.

It is because the force which a positively-charged atom exerts on an electron is so great and because the electron is so light and easily moved compared to an atom that the electron has not been isolated at will until recent years. The isolation in fact depends upon the electron being endowed with a sufficient speed to carry it through or past the action of an atom which is seeking to absorb it into its system. A lump of matter flying in space might enter our solar system with such speed as to be able to pass through and go on its way almost undeflected. Or again, it might have a much lower speed and go so much nearer the sun that it was seriously deflected in its course, as we see in the case of comet visitors. But if for some reason or other the lump of matter found itself inside the solar system without the endowment of high velocity it would certainly be absorbed. Just so an electron can pass through an atom with or without serious deviation from its line of motion, provided that motion is rapid enough. Only recently have we been able to exert electric forces of sufficient strength to set an electron in motion with the speed it must have if it is to maintain an individual existence. Now we can gather electrons at will, dragging them from the interior of solid bodies, and hurl them with tremendous speed like a stream of projectiles. Since in the open air the speed is soon lost by innumerable collisions with the air-molecules, the effect can only be studied satisfactorily in a glass bulb from which the air has been evacuated. Crookes made great improvements in air-pumps during an investigation on thallium, and consequently was able to obtain the high vacuum required for the experiment with the electron streams. It was afterwards found by Röntgen that when an electron stream in an evacuated bulb was directed upon a target placed

within the bulb, a remarkable radiation issued from the target. Thus arose the so-called X or Röntgen rays. As you all know they have for many years played a most important part in surgery and medicine. You may have heard that during the war they were also used to examine the interior of aeroplane constructions and to look for flaws invisible from without. Although X-Rays are of the same nature as light rays they can penetrate where light rays cannot, passing in greater or less degree through materials which are opaque to visible light and allowing us to examine the interior which is hidden from the eye.

Every electric discharge is essentially a hurried rush of electrons. When we rub two bodies together and they become electrified we have in some way or other torn electrons from one of the bodies and piled them on the other. The former becomes the positively charged body and the latter the negative. A film of moisture stops this action. When wool is spun in factories it tends to become in certain stages of the process too dry and too free from grease; the yarn then becomes electrified as it passes over the leather rollers, and when the machine tries to spin the threads together they fly apart and refuse to join up the minute hooks with which the wool fibres are furnished. The spinning operation would come to an end were there not means provided by which the air can be so filled with moisture that the fibres become damp and the action ceases. So in some cases a stream of air filled with positive and negative ions is made to play upon the fibres; the fibres select what ions they want, and so neutralizing themselves, spinning can proceed again.

When a current of electricity runs along a wire there is in fact nothing more than a procession of electrons. The stream of electrons that runs through the filaments in the lamps that light this room, raising the filaments to a white heat, are set in motion by the dynamos in the city.

There is a complete wire circuit, including the dynamo, the conductors, and the lamps. When the dynamos are not working the electrons do not as a whole move either way, though they are always there. When the dynamo begins to turn, the electrons set out on their continuous journey.

Electrons are involved in the emission of wireless signals, and in their receipt. The so-called 'valve', which multiplies minute electric signals and was so greatly improved during the war, depends entirely on the action of electrons, and the brilliant experimental work was based on the newly-acquired knowledge of their properties.

I have told you that under certain circumstances a stream of electrons may generate X-Rays, in reality a form of light rays. This action is a very common one, and it is curious that the faster the electron goes the shorter is the wave-length of the radiation. A very fast electron generates an X-Ray of so short a wave-length that the penetrating power of the ray, which goes with the shortness of the wave, is excessive, and in this way we may have rays which go right through the human body or even through inches of steel. As the speed of the exciting electron becomes less, the X-Rays are less penetrating. With still slower electrons we may generate ordinary light, and it will take a slower electron to generate red than to generate blue. The slowest electrons we use in this way have a speed of many hundred miles per second; the fastest have a speed which nearly approaches that of light, or 186,000 miles a second.

And conversely radiation can set electrons in motion. When X-Rays are driven into a patient's body electrons are set in motion within, and moving over certain minute distances, initiate chemical actions which are necessary to some cure. Or they may go right through the body and fall on a photographic plate, setting in operation chemical action which forms a picture on the plate.

There is another occasion of an entirely different kind when the electron is greatly in evidence and displays effects which are most astonishing and significant. Every atom of radium or other radio-active substances sooner or later meets with the catastrophe in which its life as radium ends and atoms of other substances are formed. At that moment occurs the emission which is the characteristic property of the substance. One of the radiations emitted consists of high-velocity electrons, moving, some of them, nearly as fast as light.

Now it is found that when the speed approaches that of light, 186,000 miles or $3 \times 10^{10}$ centimetres per second, the energy is higher than it should be if it followed the usual rule, viz. energy is equal to half the mass multiplied by the square of the velocity. It would seem that an electron moving with the velocity of light would have infinite energy; or, to put the matter in another way, the experimenter in his laboratory can never hope to observe an electron moving so fast; it would be the end of his laboratory and of himself if ever it turned up.

Linked up with this result is the very strange fact that no one has ever been able to find any direct evidence of the existence of the ether, which is postulated in order to carry light-waves. It has been pictured as a medium through which the heavenly bodies move, and to which their motions may be referred. But when light is launched into the ether, its apparent velocity must depend on whether it travels with or against the drift of the ether through the laboratory where the measurement is made. The experiment has been performed without the discovery of any such difference, although the method was amply accurate enough to detect the effect that might be expected. It was afterwards shown that the negative result might be explained by supposing that a measure of length varied in length according to whether it was travelling with or against the ether. But the continual

failure of all such experiments has led to a remarkable hypothetical development with which the name of Einstein is firmly connected. It is supposed that some flaw must exist in our fundamental hypotheses, and that if this were corrected we should then find that we ought to get the same value for the velocity of light however and whenever we measured it, and at the same time we should find that no measurement of the velocity of a body moving relative to the observer would ever equal the velocity of light. The hypothesis denies the existence of an absolute standard to which motions can be referred, and insists that they must all be considered relatively to the observer. It is called the principle of relativity. Calculations of its consequences begin with the necessary changes in the fundamentals, such as Einstein has introduced.[1]

Time does not allow me to say more of the innumerable ways in which electrons play an essential part in all the processes in the world. We have long believed that this is so, but the picture has never been so clear to us as it is now; and with our understanding our power is increased. Yet once more the illumination of our understanding comes from our recognition that Nature has preferred the discrete to the continuous and that electricity is not infinitely divisible but is, like matter, and even more simply than matter, of an atomic structure. And we have found the unit and learnt how to handle it.

It is even more strange that it may now be said of energy that there are signs of atomicity. It may seem absurd to think that the energy which is transformed in

[1] Since this address was given, the results of the Eclipse Expedition to Brazil are considered to have confirmed in a satisfactory manner one of the most remarkable deductions made by Einstein from the principles which he maintains. The matter has roused so much interest that some of the leading exponents of the relativity principle have published careful accounts intended for students not familiar with it: it would therefore be superfluous to discuss the matter here.

any operation is transformed in multiples of a universal unit or units, so that the operation cannot be arrested at any desired stage but only at definite intervals. Indeed we have no right to assert that this is always true. But undoubtedly there are cases in which the atomicity of energy is clear enough, as for example in the interchange of energy between electrons in motion and radiation. It is remarkable that when radiation sets an electron in motion, the electron acquires a perfectly definite speed depending only on the wave-length of the radiation and not on its intensity, and has apparently absorbed from the radiation a definite unit of energy. Radiation of a particular wave-length cannot spend its energy in this way except in multiples of a certain unit, because each of the electrons which it sets in motion has the same initial energy, which it must have got from the radiation. In other words, energy of radiation of the particular wave-length can only be transformed into energy of movement of electrons in multiples of a certain 'quantum' peculiar to that wave-length. The intensity of the radiation, that is to say, the amount of energy moving along the beam, can only affect the number of electrons set in motion and not the speed of any one of them. During the last few years a very extraordinary theory has been developed on the basis of these and similar facts. I doubt if it would be more profitable to give further instances at present, but I have mentioned it because it seems to show looming on the horizon of our knowledge another tendency of Nature to make use of the atomic principle.

I will only add that the whole position of physics is indeed at this time of extraordinary interest, and at any moment there may be some great discovery or illuminating thought which will explain the present startling difficulties and open up new worlds of thought.

For Reference

Bragg, *Rays and Crystals* (Ball & Sons).

# IX

# PROGRESS IN BIOLOGY DURING THE LAST SIXTY YEARS

Professor Leonard Doncaster, F.R.S.

On November 24, 1859, *The Origin of Species* was published, and this date marks the beginning of an epoch in every branch of biology. Before it, Biology had been almost entirely a descriptive science, but within a few years after the publication of the *Origin* its effects began to colour all aspects of biological research. A co-ordinating and unifying principle had been found, and the leading idea of biologists ceased to be to describe living things as they are, and became transformed into the attempt to discover how they are related to one another. The first effect of this change of attitude was chiefly to turn biologists towards the task of tracing phylogenetic or evolutionary relationships between different groups of animals—the drawing up of probable or possible genealogical trees and the explanation of natural classification on an evolutionary basis. When once, however, the notion of cause and effect, or more correctly of relationship, between the phenomena seen in living beings had become familiar to biologists, it spread far beyond the limits of tracing genealogical connexions between different animals and plants. It made possible the conception of a true Science of Life, in which every phenomenon seen in a living organism should fall into its true place in relation to the rest, and in which also the phenomena of life should be correlated with those discovered in the inorganic sciences of Chemistry and Physics.

The history of the various branches of biological science in the past sixty years reflects the general course of these tendencies. Until shortly after 1859, the study of morphology, or the comparative structure of animals (and of plants) was intimately related with that of physiology, that is, with the study of function. In the years following the appearance of the *Origin*, however, anatomists and morphologists were seized with a new interest. For the time at least, the chief aim in studying structure was no longer to explain function, but rather to explain how that structure had come into being in the course of evolution, and how it was related with homologous but different structures in other forms. The result was a tendency to a divorce between morphology and physiology, or at least between morphologists and physiologists, which led to the division into two more or less distinct sciences of what had hitherto been regarded as closely inter-related branches of one. The greater men of the early part of the period, such as Huxley, remained both morphologists and physiologists, but most of their followers fell inevitably into one or the other group, and in discussing the later phases of biological progress it will be necessary to keep them separate.

Apart from its effect on the systematic and anatomical side of Biology, the idea of Evolution, and especially of Darwin's theory of Natural Selection, had important consequences on that side of the science which may be described as Natural History. Before the appearance of Darwin's work, Natural History consisted chiefly in the observation and collection of facts about the habits and life-history of animals and plants, which as a rule had no unifying principle unless they were used, as in the Bridgewater Treatises, to illustrate 'the power, wisdom, and goodness of God'. Now, however, a new motive was provided—that of discovering the uses to the organism of

its various colours, structures, and habits, and the application of the principle of natural selection to show how these characters conduced to the preservation and further evolution of the species. And out of this interest in the theory of natural selection grew in the last twenty years of the nineteenth century the greatly increased attention to the facts and theories of heredity, which was stimulated by Darwin's hypothesis of Pangenesis and especially by Weismann's speculations about the nature and behaviour of the 'germ-plasm'. Before the appearance of Weismann's work, the germ-cells, which bear somehow or other the hereditary characters that appear in the offspring, were supposed to be produced directly from the body of the parent. Darwin provisionally suggested that every cell of every organism gives off minute particles which become congregated in the germ-cells, and that these cells thus contain representative portions of all parts of the parent's body. Weismann, on the basis of his work on the origin of the germ-cells in Medusae and Insects, maintained that these cells are not derived from the body, but only from pre-existing germ-cells stored within it—that, in fact, although an egg gives rise to a hen, a hen does not give rise to an egg, but only keeps inside her a store of embryonic eggs which mature and are laid as the time comes round. The theory had to be modified to suit the facts of regeneration and vegetative reproduction, but in essence it was accepted by the biological world and is the orthodox opinion (if such a word may be used in Science) at the present day. The difference between the two views is not only of theoretical interest, for it involves the whole question of whether characteristics acquired by an individual during its life in response to external conditions can or cannot be transmitted to offspring. If the germ-cells contain representatives of all parts of the body, modifications impressed on the body during its life may at least

possibly be transmitted to offspring born after the modifications have taken place. If, however, the germ-cells are independent of the rest of the body, and only stored within it for safe-keeping like a deed-box in the vaults of a bank, it would seem impossible for any environmental influence, whether for good or ill, to take effect on the offspring. This controversy on the heritability of 'acquired characters' was one of the most important towards the end of last century, and although the majority of biologists now follow Weismann in so far as they deny that 'acquired' characters are transmissible, the question is not yet completely settled; all that can be said is that, in spite of many attempts to prove the contrary, there is no satisfactory evidence of the transmission to offspring of effects impressed on the body of the parent, unless the germ-cells themselves have been affected by the same cause—as for example in some cases of long-continued poisoning by alcohol or similar drugs.

While the problem of the transmission of acquired characters, and of the cause of variation and its relation to evolution, was occupying much of the attention of biologists, the whole problem entered upon a new phase in the year 1900 with the re-discovery of Mendel's work on heredity. Mendel worked with plants, and published his results in 1865, but at that time the biological world was too much occupied with the fierce controversy which raged over *The Origin of Species* to take much notice of a paper the bearing of which upon it was not appreciated. Mendel's discovery never came to the notice of Darwin, was buried in an obscure periodical, and remained unknown until many years after the death of its author. In 1900 it was unearthed, and, largely owing to the work of Bateson, it rapidly became known as one of the most important contributions to Biology made during the period under review.

This is not the place to describe in detail the nature of Mendel's theory. Its essence is, firstly, that the various characteristics of an organism are in general inherited quite independently of one another; and, secondly, that the germ-cells of a hybrid are pure in respect of any one character, that is to say, that any one germ-cell can only transmit any unit character as it was received from one parent or the other, and not a combination of the two. This leads to a conception of the organism as something like a mosaic, in which each piece of the pattern is transmitted in inheritance independently of the rest, and in which any piece cannot be modified by association with a different but corresponding piece derived from another ancestor. It is impossible to say as yet whether this conception at all completely represents the nature of the living organism, but it is one which is exercising considerable influence in biological thought, and if established it will mark a revolution in Biology hardly inferior to that brought about in Physics and Chemistry by the discovery of radio-activity.

An important consequence of the advance in our knowledge of heredity associated with the work of Mendel and his successors is a tendency to doubt whether natural selection is of such fundamental importance in shaping the course of evolution as was supposed in the years of the first enthusiasm which followed the publication of the *Origin*.

Darwin based his theory of Natural Selection on the belief which he derived from breeders of plants and animals, that the kind of variation used by them to produce new breeds was the small and apparently unimportant differences which distinguish a 'fine' from a 'poor' specimen. He supposed that the skilled breeder picked out as parents of his stock those individuals which were slightly superior in one feature or another, and that

by the accumulative effect of these successive selections not only was the breed steadily improved, but also, by divergent selection, new breeds were produced. Experience shows, however, that although this method is used to keep breeds up to the required standard, it is rarely, if ever, the means by which new breeds arise. New breeds commonly come into existence either by a 'sport' or mutation, or by crossing two already distinct races, and by selecting from among the heterogeneous descendants of the cross those individuals which show the required combination of characters. And it is further found that most of the distinguishing features of various breeds of domestic animals and plants are inherited according to Mendel's Law, suggesting that each of these characters is a unit, like one piece of a mosaic, independent of the rest. Now it is easy to see how the selection of small, continuously varying characters could take place in Nature by the destruction of all those individuals which failed to reach a certain standard, but it is much more difficult to understand how natural selection could act on comparatively large, sporadic, unco-ordinated 'sports'. There is thus a distinct tendency at present to regard natural selection as less omnipotent in directing the course of evolution than was formerly supposed, but it must be admitted that no very satisfactory alternative hypothesis has been suggested. Some have supposed that there is a kind of organic momentum which causes evolution to continue in those directions in which it has already proceeded, while others have postulated, like Bergson, an *élan vital* as a kind of directive agency. Others again have reverted towards the older belief in the inherited effects of environment—a belief which, in spite of the arguments of Weismann and his followers, has never been without its supporters. The present condition of this part of biology, as of many others, is one of open-mindedness approaching agnosticism.

There is dissatisfaction with the beliefs which satisfied the preceding generation, and which were held up almost as dogmas, but there is no clear vision of the direction in which a truer view may be sought.

Before leaving this side of the subject, reference must be made to one important aspect of modern work on heredity—that of the inheritance of 'mental and moral' characteristics. As a result of the work of the biometric school founded by Galton and Pearson, it has been shown that the so-called mental and moral characteristics of man are inherited in the same manner and to the same extent as his physical features. Of the theoretical importance of this demonstration this is not the place to speak; its practical value is unquestionable, and may in the future have important effects on sociological problems.

Another notable line of advance, entirely belonging to the period under review, and chiefly the product of the present century, is seen in the science of Cytology—the investigation of the microscopic structure of the cells of which the body is composed. The marvellous phenomena of cell- and nuclear division have revealed much of the formerly unsuspected complexity of living things, while the universality of the processes shows how fundamentally alike is life in all its forms. In recent years great progress has been made in correlating the phenomena of heredity and of the determination of sex with the visible structural features of the germ-cells. Weismann attempted a beginning of this over thirty years ago, but the detailed knowledge of the facts was then insufficient. Since the discovery of Mendel's Law, a great amount of work has been done, chiefly in America, by E. B. Wilson and T. H. Morgan and their pupils, on tracing the actual physical basis of hereditary transmission. Although the matter is far from being completely known, the results obtained make it almost indubitable that inherited characters are in some

way borne by the *chromosomes* in the nuclei of the germ-cells. The work of Morgan and his school has shown that the actual order in which these inherited 'factors' are arranged in the chromosomes can almost certainly be demonstrated, and his results go far to support the conception of the organism, referred to above, as a combination or mosaic of independently inherited features.

It was said at the beginning of this sketch that most of the more notable lines of advance in Biology could be traced back to the impetus given by the acceptance of the theory of Evolution, and the desire to test and prove that theory in every biological field. It is most convenient, therefore, to take this root-idea as a starting-point, and to see how the various branches of study have diverged from it and have themselves branched out in various ways, and how these branches have often again become intertwined and united in the later development of the science.

Perhaps the most obvious method of testing the theory of evolution is by the study of fossil forms, and our knowledge of these has progressed enormously during the period under review. Not only have a number of new and strange types of ancient life come to light, but in some cases, e.g. in that of the horse and elephant, a very complete series of evolutionary stages has been discovered. In this branch, however, as in almost all others, the results have not exactly fulfilled the expectations of the early enthusiasts. On the one hand, evolution has been shown to be a much more complex thing than at first seemed probable; and on the other, many of the gaps which it was most hoped to fill still remain. A number of most remarkable 'missing links' have been discovered, such as, for example, *Archaeopteryx*, the stepping-stone between the Reptiles and the Birds, and the faith of the palaeontologist in the truth of evolution is everywhere confirmed. But the hope of finding all the stages,

especially in the ancestry of Man, has not been realized, and it has been found that what at one time were regarded as direct ancestors are collaterals, and that the problem of human evolution is much less simple than was once supposed.

A second important piece of evidence in favour of evolution is provided by the study of the geographical distribution of animals, on which much work was done in the earlier part of the period under review. And in this connexion mention must be made of the science of Oceanography, for our whole knowledge of life in the abysses of the ocean, and almost all that we know of the conditions of life in the sea in general, has been gained in the last fifty years.

Another of the chief lines of evidence for the truth of the evolution theory is based on the study of embryology, and this also was followed with great vigour by the zoologists of the last thirty years of the nineteenth century. It is found that in many instances animals recapitulate in their early development the stages through which their ancestors passed in the course of evolution. Land Vertebrates, including man, have in their early embryonic life gill-clefts, heart and circulation, and in some respects skeleton and other organs of the type found in fishes, and this can only be explained on the assumption that they are descended from aquatic fish-like ancestors. On the basis of such facts as these, the theory was formulated that every animal recapitulates in ontogeny (development) the stages passed through in its phylogeny (evolution), and great hopes were founded upon this principle of discovering the systematic position and evolutionary history of isolated and aberrant forms. In many cases the search has led to brilliant results, but, as in the case of palaeontology, in many others the light that was hoped for has not been forthcoming. For it soon became evident that the majority of animals show adaptation to their

environment not only in their adult stages but also in their larval or embryonic period, and these adaptations have led to modifications of the course of development which are often so great as to mask, or obscure altogether, the ancestral structure which may once have existed. Although, therefore, the results of embryological research have provided most convincing proof of the truth of the theory of evolution in general, they have not completely justified the hopes of the early embryologists that by this method all the outstanding phylogenetic problems might be solved.

The detailed study of embryology, however, has led to most important results apart from the particular purpose for which most of the earlier investigations in this field were originally undertaken. For the study of embryology, at first purely descriptive and comparative, was soon found to involve fundamental problems concerning the factors which control development. An egg consists of a single cell, and it develops by the division of this cell into two, then into four, eight, and so forth, until a mass of cells is produced. In some cases all these cells are to all appearance alike, or nearly alike; in others the included yolk is from the first segregated more or less completely into some cells, leaving the other cells without it. But in any case, after this process of cell-division has proceeded for a certain time, differentiation begins to set in—some cells become modified in one way, others in another, and from what was a relatively homogeneous mass an organized embryo, with highly differentiated parts, appears. The problem immediately propounds itself—what are the factors which control this differentiation? This problem is essentially a physiological one, and yet, since it arises most conspicuously in a field which has been worked by professed zoologists rather than physiologists, it has been studied more by those trained in zoology and botany than by

those who have specialized in physiology. In this way, as in many other directions, such as in the study of heredity, of sex, and of the effects of the environment on the colours and structure of animals, the trend of zoology in recent years has returned towards the physiological side, and the old division which separated the sciences (but which has never so seriously affected students of plant life) is being obliterated.

Hence we are led back to consider the progress of Physiology as a whole—a subject with which the present writer hesitates to deal except in a very superficial manner. Physiology as an organized science has inevitably been deeply influenced by its close relation with medicine, with the result that through a large portion of the period under review it has concerned itself chiefly with the functions of the human body in particular, or at least chiefly with Vertebrates from which, by analogy, the human functions may be inferred. In this field it has made enormous progress, and a vast amount of knowledge has been gained with regard to the function and mechanism of all the parts and organs of the body. It may perhaps be suggested, however, that in the pursuit of this detailed (and in practice absolutely necessary) knowledge, physiologists have to some extent lost sight of the wood in their preoccupation with the trees. That is to say, while they have advanced an immense distance in their knowledge of organs, they have not yet got as far as might be hoped in the understanding of the organism—which is to say no more than that the great and fundamental problem of Biology, the nature and meaning of Life, is apparently almost as far from solution as ever. To this further reference will be made below.

The progress of Physiology has been so great in all its branches that it is difficult to decide which most deserve mention; perhaps the most important advances are

those connected with the nervous system and with internal secretions. Little or nothing was known fifty years ago of the minute structure of the nervous system, nor of the special functions of its different parts. Now the main functions of the various parts of the brain, and the relation of these parts to the activities of the other organs of the body, are well known, although much remains to be discovered with regard to the more detailed localization of function. The study of the microscopic structure of brain and nerve, and experiment on the conduction of nervous impulse, have given us some insight into the mechanism of the nervous system, but the fundamental nature of nervous action still remains unsolved.

The nervous system is the chief co-ordinating link between the various organs of the body, but in recent years it has been discovered that the relations of the different parts to one another are greatly influenced by substances known as internal secretions or 'hormones'. These substances are produced by ductless glands (the thyroid, suprarenals, &c.), from which they diffuse into the blood-stream and exercise a remarkable influence either on particular organs or systems, or on the body as a whole. Some of these secretions act specifically on the involuntary muscles of the body, others control growth, others the development of the secondary sexual characters, such as the distinctive plumage of male birds, and also greatly influence the sexual instinct. Much still remains to be discovered with regard to them, but it seems clear that they are of immense importance in the economy of the body. It has been suggested, without much experimental support, however, that if a part of the body becomes modified by use or environment, it may produce a modified hormone, and that so, by the action of this on the germ-cells, the modification may be transmitted to subsequent generations.

Before leaving the subject of physiology in the more special or technical application of the term, reference must be made to another science the growth of which has been largely under the influence of medicine. This is bacteriology, one of the newest branches of biology, and yet one which both from its practical importance and from the theoretical interest of its discoveries is rapidly taking a foremost place. Of its practical achievements in connexion with disease, and with the part played by bacteria and other minute organisms in the life and affairs of man, it is not necessary to speak. Every one knows the great advances that have been made in recent years in identifying (and to a less extent in controlling) disease-producing organisms, whether bacteria, protozoa (such as the organisms causing malaria, dysentery, etc.), or more highly organized parasites. The attempt, however, to combat these pathogenic bacteria has led to discoveries of the highest importance with regard to the production of immunity, not only against specific germs, but against many organic poisons such as snake venom and various vegetable toxins. That an attack of certain diseases leaves the patient immune to that disease for a longer or shorter time has of course been known for centuries, but it is a modern discovery that a specific poison induces the body to produce a specific antidote which neutralizes it, and the detailed working out of this principle and the study of the means by which the immunity is brought about promise to lead us a long way towards the central problem of the nature and activities of life itself.

We have seen how zoology has been led back into physiological channels of research, and how the study of bacteria is opening up some of the deepest problems of the reaction of living things to environmental stimuli, and just as the various branches of these sciences interlace and influence one another, so all of them, in recent years,

have been coming into contact with the inorganic sciences of chemistry and physics. One of the noteworthy features of science in all its branches in recent years has been the tendency of subjects which were at one time regarded as distinct to come together again and to find that the problems of each can only be successfully attacked by the co-operation of the others. In their earlier days the biological sciences were in most respects far removed from chemistry and physics; it was recognized, of course, that organisms were in one sense at least physico-chemical mechanisms, consisting of chemical elements and subject to the fundamental laws of matter and energy. With the advent of the theory of evolution this conception of the organism as a mechanism took more definite shape, and among many biologists the belief was held that in no very long time all the phenomena of life would be explicable by known physico-chemical laws. Hence arose the scientific materialism which was so widespread in the years following the general acceptance of Darwin's theory. It was recognized, of course, that our knowledge of organic chemistry was at the time entirely inadequate to place this belief upon a proved scientific basis, but the expectation of proving it gave a great impetus to the study of the physical and chemical phenomena of life. This attempt was still further stimulated by the investigation of the factors controlling development referred to in a preceding paragraph, for it is evident that to a great extent at least these factors are chemical and physical in nature. And concurrently, the great advances in organic chemistry, resulting in the analysis and in many cases in the artificial synthesis of substances previously regarded as capable of production only in the tissues of living organisms, made possible a much more thorough investigation of the chemical and physical basis of vital phenomena. The result of this has been that to a quite considerable extent

the factors, hitherto mysterious, which control the fertilization, division, and differentiation of the egg, the digestion and absorption of food, the conduction of nervous impulses, and many of the changes undergone in the normal or pathological functioning of the organs and tissues, can be ascribed to chemical and physical causes which are well known in the inorganic world.

As in other instances, however, some of which have been mentioned above, the elucidation of the organism from this point of view has turned out to be a much less simple process than the more sanguine of the early investigators supposed. The more knowledge has progressed, the more complex and intricate has even the simplest organism shown itself to be, and although the mechanism of the parts is gradually becoming understood, the fundamental mystery of life remains as elusive as ever.

The chief reason for this failure to penetrate appreciably nearer to the central mystery of life appears to be the fact that an organism is something more than the sum of its various parts and functions. In tracing the behaviour of any one part or function, whether it be the conduction of a nervous impulse, the supply of oxygen to the tissues by the blood, or the transmission of inherited characters by the germ-cells, we may be able to give a more or less complete physico-chemical or mechanical account of the process. But we seem to get little or no nearer to an explanation of the fact that although every one of these processes may be explicable by laws familiar in the non-living, in the living organism they are co-ordinated in such a way that none of them is complete in itself; they are parts of a whole, but the whole is not simply a sum of its parts, but is in itself a unity, in which all the parts are subject to the controlling influence of the whole. An organism, alone among the material bodies which we know, is constantly and necessarily in a state of unstable

equilibrium, and yet has a condition of *normality* which is maintained by the harmonious interaction of all its parts. Every function of the body, if not thus co-ordinated with the rest, would very quickly destroy this condition of normality, but in consequence of the co-ordination each is subject to the needs of the whole, and normality is maintained. When the normality is artificially disturbed, all the functions of the body adapt themselves to the change, and, if the disturbance be not too great, co-operate in the restoration of the normal condition. It is in these phenomena of adaptation and organic unity and co-ordination that up to the present time the efforts to reduce the phenomena of living things to the operation of physico-chemical laws have most conspicuously failed.

From what has been said it will be evident that, fundamentally, all biological research, whether its authors are conscious of it or not, is directed towards the solution of one central problem—the problem of the real and ultimate nature of life. And the main outcome of the work of sixty years has been that this problem has begun clearly to emerge as the central aim of the science. The theory of evolution made the problem a reality, for without evolution the mystery of life must for ever be insoluble, but whatever direction biological investigation has taken, it has led, often by devious paths, to the borderland between the living and the inorganic, and in that borderland the central problem inevitably faces us.

Many suggestions for its solution have been made. On the one hand there is still, as there always has been, a considerable body of opinion that the solution will be a mechanical one—using the word mechanical in the widest sense—and that the living differs from the non-living not in kind, but only in degree of complexity. The upholders of the mechanistic or materialist theory, however, are perhaps less confident than their predecessors of the last century, for the solution in this direction

has to face not only the problem of organic co-ordination already referred to, but also that of consciousness and mind. For although the study of psychology on physiological lines has made similar progress to that of other branches of physiology, it seems to approach little nearer to a discovery of the nature of the relation between consciousness in its various aspects and the material body with which it is associated. So long as this gulf remains unbridged, the possibility of a satisfactory mechanistic explanation of life seems far away.

On the other hand, there has been a revival of the ancient tendency towards what is called a vitalistic solution. A certain number of biologists, impressed by the apparent similarity between the control and co-ordination exercised by the organism over its functions and the conscious control of voluntary activity with which we are familiar in ourselves, have supposed that these things are not merely superficially similar but have a real and fundamental affinity. This does not mean that organic control is always conscious, but that there is a controlling entity, non-material in nature, which is similar in kind to the 'ego' of a self-conscious human being. They suppose that the organism is not simply material, but is a material mechanism controlled by a non-material entity the nature of which is more akin to what we mean by the word spirit than anything else of which we are accustomed to think. They are in fact dualists, and divide reality into the material and spatial on the one hand, and non-material principle or entity which may fairly be called spiritual on the other.

And, in the third place, there are those who seek a solution which denies the truth of both the preceding, and which is metaphysically idealist or monist in character. To them, if the present writer understands their attitude, matter and spirit are different aspects of one reality. In the inorganic and non-living, phenomena appear which are generalized under the laws of physics and chemistry.

but the phenomena of life fall into a different category which includes the conception of co-ordination or individuality, while a still higher category is required to include the phenomena of consciousness and mind.

It is evident from this brief review that Biology in the period considered has passed through three main stages. The first of these was the acceptance of a new illuminating and unifying idea, which led to enthusiastic research in many directions for the purpose of proving and amplifying it. Very rapidly new facts, or new interpretations of facts already known, were shown to fall into line, and the evolution theory became converted from a hypothesis into something approaching a dogma. Not only the idea of organic evolution itself, but all the current beliefs about the method of evolution, and the larger speculations to which it gave rise, were widely regarded as almost indisputable, and where difficulties and inconsistencies appeared, these were supposed to be due solely to the insufficiency of our knowledge, which would soon be remedied. Then, however, as detailed knowledge increased, the voice of criticism and doubt was more frequently heard. The various branches of Biology began once more to overlap, and to join hands with chemistry and physics, and it became clear that the interpretation of life was very far from being a simple problem. And so, as with the Atomic Theory in chemistry, the present position is one of dissolution of the older ideas and of hesitation to express a fixed belief, for while Biology has a clearer vision of the problem before it than ever it had, its wider knowledge reveals the fact that the problem is far from being solved. Perhaps one of the chief results of the great increase of knowledge during the past sixty years has been to show us the immensity of the field still remaining to be explored.

For Reference

Centenary volume on Darwin (Cambridge University Press).

# X

# ART

A. Clutton-Brock

My subject is art and thought about art. I deal with aesthetics only so far as they concern art, that is to say I shall not attempt any purely philosophic speculations about the nature of art and I shall speak of the speculations of others, such as Croce and Tolstoy, only so far as they seem to me likely to have a practical effect upon art. My subject is the art of to-day and our ideas about it. We are beginning at last to connect aesthetics with our own experience of art and to see that our beliefs about the nature and value of art will affect the art we produce. Hence a new aesthetic is very slowly appearing; but I have to confess it has not yet appeared.

Indeed there are at present two conflicting theories of art, one or other of which is held consciously or unconsciously by most people who are interested in art at all, and both of which I think are not only imperfect but to some extent false. They are theories about the relation of the artist to the public, and, because of the conflict between them and the falsity of each, we are confused in our ideas about art, and the artists are often confused in their practice of it.

The first theory has been expressed, not philosophically but with great liveliness, by Whistler in his *Ten O'clock*, and has had great influence both upon the thought of many people who care about art and upon the practice of artists. It is, put shortly, that the artist has no concern with the public whatever, nor the public with the artist.

There is no kind of necessary relation between them, but only an accidental one; and the less of that the better for the artist and his art.

Whistler states it in the form of a New Testament of his own.

'Listen,' he says. 'There never was an artistic period.

'There never was an art-loving nation.

'In the beginning man went forth each day—some to do battle, some to the chase; others again to dig and to delve in the field—all that they might gain and live or lose and die. Until there was found among them one differing from the rest, whose pursuits attracted him not, and so he stayed by the tents with the women, and traced strange devices with a burnt stick upon a gourd.

'This man, who took no joy in the ways of his brethren—who cared not for conquest and fretted in the field—this designer of quaint patterns—this deviser of the beautiful—who perceived in nature about him curious curvings—as faces are seen in the fire—this dreamer apart, was the first artist.'

'And when from the field and from afar, there came back the people, they took the gourd—and drank from it.'

Whistler means that they did not notice the patterns the artist had traced on it.

'They drank at the cup,' he says, 'not from choice, not from a consciousness that it was beautiful, but because forsooth there was none other.'

So gradually there came the great ages of art.

'Then', he says, 'the people lived in marvels of art—and ate and drank out of masterpieces for there was nothing else to eat and drink out of, and no bad building to live in.'

And, he says, the people questioned not, and had nothing to do or say in the matter.

But then a strange thing happened. There arose a new class

'who discovered the cheap, and foresaw fortune in the facture of the sham. Then sprang into existence the tawdry, the common, the gewgaw, and what was born of the million went back to them and charmed them, for it was after their own heart. . . . And Birmingham and Manchester arose in their might—and Art was relegated to the curiosity shop.'

I do not think this can be a true account of the matter; for if the people were not aware of the existence of art and did not value it at all, how came they to imitate it? One imitates only that which one values. Imitation, as we know, is the sincerest form of flattery; and you cannot flatter that which you do not know to exist.

But Whistler's account of the primitive artist is also wrong, so far as we can check it. We may be sure that, if the other primitive men had seen no value in his pursuits, they would have killed him or let him starve. And the artist, as he exists at present among primitive peoples, is not a dreamer apart. The separation between the artist and other men is modern and a result of modern specialization. In many primitive societies most men practise some art in their leisure, and for that reason are interested in each other's art. In fact they notice the cups they drink out of much more than we do. If we did notice the cups we drink out of, we should not be able to endure them. In primitive societies there are not star pianists or singers or dancers; they all dance and make music. Homer himself was a popular entertainer; he would have been very much surprised to hear that he was a dreamer apart. In fact Whistler made up this pretty story about the primitive artist because he assumed that all artists must be like himself. He read himself back into the past and saw himself painting primitive nocturnes in a primitive Chelsea, happily undisturbed by primitive critics. He is wrong in his facts, and I believe he is wrong in his theory. There is a relation, and a necessary relation, between

the artist and his public; but what is the nature of it? That is a difficult question for us to answer because the relation now between the artist and the public is, in fact, usually wrong; and Tolstoy in his *What is Art?* tried to put it right.

*What is Art?* is a most interesting book, full of incidental truth; but I believe that the main contention in it is false. I will give this contention as shortly as I can in his own words.

'Art', he says, 'is a human activity, consisting in this—that one man consciously, by means of certain external signs, hands on to others feelings he has lived through, and that other people are infected by these feelings and also experience them.'

Now this is well enough as far as it goes, but it is not enough, and just because it is not enough it leads Tolstoy into error. Clearly, if art is nothing but the infection of the public with the feelings of the artist, it follows that a work of art is to be judged by the number of people who are infected. And Tolstoy with his usual sincerity accepts these conclusions; indeed, he wrote his book to insist upon them. He judges art entirely as a thing of use, moral use, and he says it can be of no use unless a large audience is infected by it. A work of art that few can enjoy fails as art, just as a railway from nowhere to nowhere fails as a railway. A railway exists to be travelled by and a work of art exists to be experienced by as many people as possible. Here are the actual words of Tolstoy:

'For a work to be esteemed good and to be approved of and diffused, it will have to satisfy the demands, not of a few people living in identical and often unnatural conditions, but it will have to satisfy the demands of all those great masses of people who are situated in the natural conditions of laborious life.'

Now this sounds plausible ; but consider the effect of it upon yourself. You listen to a symphony by Beethoven ; and before you esteem it good, you must ask yourself, not whether it is good to you, but whether it will satisfy the demands of those great masses of people who are situated in the natural conditions of laborious life. Tolstoy does proceed to ask himself this question about Beethoven's Choral symphony and about King Lear, and condemns them both because, he says, a Russian peasant would not understand them. But if we all obeyed him and asked this question about all works of art, we should none of us ever experience any work of art at all ; for, while we listened to a piece of music, we should be wondering whether other people understood it ; that is to say we should not listen to it at all. And what is this Jury of people situated in the natural conditions of laborious life who are to decide not individually but as a Jury ? Who can say whether he himself belongs to them ? Who is to choose them ? Tolstoy chose them as consisting of Russian peasants ; he, like Whistler, believed in the primitive, but for him it was the primitive man, not the primitive artist, who was blessed. In his view there would be no Jury in all western Europe worthy of deciding upon a work of art, because we none of us are situated in the natural conditions of laborious life. So we must change all our way of life or despair of art altogether. Not one of the great ages of art would satisfy his conditions. Certainly not the Greeks of the age of Pericles, or the Chinese of the Sung dynasty, or the thirteenth century in France, or the Renaissance in Italy ; and as a matter of fact he condemns most of the great art of the world, including his own.

We can escape from the tyranny of Tolstoy's doctrine, as from the tyranny of Whistler's, only by considering the facts of our own experience of art. The fact that we *can*

enjoy and experience a work of art frees us from Whistler's doctrine, because, if we can enjoy and experience it, we are concerned with it. Because of our enjoyment, art is for us a social activity and not a game played by the artist for his own amusement. We know also that the artist likes us to enjoy his art, in fact complains loudly if we do not; and we do not believe that the primitive artist or man was different in this respect. There is now, and always has been, some kind of relation between the artist and the public, but not the relation which Tolstoy affirms. According to him the proper aim of art is to do good.

'The assertion that art may be good art and at the same time unintelligible to a great number of people is extremely unjust, and its consequences are ruinous to art itself.'

The word *unjust* implies that the aim of art is to do good. The artist sins if he does not try to do good to as many people as possible, and I sin if I am ready to enjoy and encourage a work of art which most people do not enjoy.

But as a matter of fact a work of art is good to me, not morally good but good as a work of art, if I enjoy it. In my estimate of the work of art I can ask only if it is a work of art to me, not if it is one to other people. I may wish and try to make them enjoy it, but if I do that is as a result of my own enjoyment of it. I can't begin by asking whether other people enjoy it; I must begin with my own experience of it, for I have nothing else to go by.

And so it is with the artist; he cannot begin by asking himself whether the mass of men will understand what he proposes to produce; he must produce it, and then trust in man, and God, for its effect. Art is produced by the individual artist and experienced by the individual man. Tolstoy holds that it is to be experienced by mankind in the mass, not by individuals; his audience is an abstrac-

tion. Whistler holds that it is produced by the individual, but for himself, and not experienced by mankind either in the mass or as individuals. Both are heretics. What is the truth?

I will now turn for a moment to the high aesthetic doctrine of Benedetto Croce. He in his *Aesthetic* tells us that all art is expression. True enough, as far as it goes; but what do we mean by expression? Croce's doctrine of expression is incomplete, he does not explain clearly what he means by expression, because he also avoids the question of the necessary relation between the artist and his audience; and this is the question which our thought about art has to deal with, just as we have to solve it in our practice of art and in our actual relation with the artist. Croce does not see that the question—What is expression? depends upon the question—What is the relation between the artist and his audience? He does see that the audience exists, which Whistler denies; he insists that the audience have the same faculties as the artist, though to a less degree—that the artist is not a dreamer apart. He says indeed that to experience a work of art we also must exercise our aesthetic faculty; our very experience of it is itself expression; and this is a most important point. But for Croce, as for Whistler, the artist, when he expresses himself, is concerned only with what he expresses, not with the people to whom he expresses himself. Croce does not see this obvious fact, that a work of art is a work of art *because it is addressed to some one* and is not a private activity of the artist. That is why he fails to give a satisfying account of the nature of expression. Croce cannot distinguish between expression, or art, and day-dreaming; but the distinction is this, that as soon as I pass from day-dreaming to expression, I am speaking no longer to myself but to others. So the form of every work of art is conditioned by the fact that it is addressed to others.

A story, for instance, is a story, it has a plot, because it is told. A play is a play, and also has a plot, because it is made to be acted before an audience. A piece of music has musical form, with its repetitions and developments, because it is made to be heard. A picture has composition, emphasis, because it is painted to be seen. The very process of pictorial art is a process of pointing out. When a man draws he makes a gesture of emphasis; he says—This is what I have seen and what I want you to see. And in each case the work of art is a work of art, expression is expression, because it implies an audience or spectators. Without that implication, without the effort of address, there could be no art, no expression, at all.

In fact, art in its nature is a social activity, because man in his nature is a social being. Art does not exist in isolation because man does not exist in isolation. His very faculties are in their nature social always and whether for good or for evil. The individual in isolation is a figment of man's mind, and so is art in isolation.

But although art is a social activity, it is not, as Tolstoy thinks, a moral activity. The artist does not address mankind with the object of doing them good. It is useless to say that he ought to have that object; if he had he would not be an artist. The aim of doing good is itself incompatible with the artistic aim. But that is not to say that art does not do good. It may do good all the more because the artist is not trying to do good.

But what is it that really happens when the artist addresses us, and why does he wish to address us? To answer this, we must consider our own experience, not merely as an audience but also as artists, for we are, as Croce insists, all of us to some extent artists. You have all no doubt been aware of some failure and dissatisfaction in those of your experiences which seem to you the highest. Suppose, for instance, you see some extreme beauty, as

of a sunset. It leaves you sad with a feeling of your own inadequacy. You have not been equal to it, and why? You will say in speaking of it to others—I wish I could tell you what I felt or what I saw, but I can't. That wish is itself natural and instantly stirred in you by the experience of extreme beauty. The experience seems incomplete, because you cannot tell anyone else what you felt and saw; and you are hurt by your effort and failure to do so.

It is a fact of human nature that the experience of any beauty does arouse in us the desire to communicate our experience; and this desire is instinctive. It is not that we wish to do good to others by communicating it. It is simply that we wish to communicate it. The experience itself is incomplete for us until we communicate it. The happiness which it gives us is frustrated by our failure to communicate it. We should be utterly happy if we could make others see what we see and feel what we feel, but we fail of happiness because we cannot.

Why? One can only conjecture and express conjectures in dull language. This beauty is itself a universal quality or virtue which makes particular things more real when they have it. It speaks to the universal in us, to the everyman in us, and, speaking so, it makes us aware of the universal in all men. We too wish to speak to that universal, we wish to find it and the more intense reality which is to be seen only where it is seen, we wish ourselves to be a part of it; and we can do that only when all other men also are a part of it. Beauty seems to speak not merely to us but to the whole listening earth, and we would be assured that all the earth is listening to it, not to us.

But we ourselves have to play our part in the realizing of this universal; the sense of it comes and goes; for the most part we ourselves are not aware of it. We are merely

particulars, like other men, and separated from them by the fact that we are all particulars. Only, when for a moment we are aware of it, then we are filled with a passion to make it real and permanent; and it is this passion which causes art and the blind instinctive effort at art, at communication, at expression, which we have all experienced.

But it follows from this that the audience to which the artist addresses himself is not any particular men and women: it is mankind. The moment he addresses himself to any particular men and women and considers their particular wants and desires, he is giving up that very sense of the universal that impelled him to expression; he is ceasing to be an artist and becoming something else, a tradesman, a philanthropist, a politician. The artist as artist speaks to mankind, not to any particular set of men; and he speaks not of himself but of that universal which he has experienced. His effort is to establish that universal relation which he has seen, a universal relation of feeling. And to him, in his effort, there is neither time nor space. Mankind are not here or there or of this moment or of that; they are everywhere and for ever. The voice in Mozart's music is itself a universal voice speaking to the universe of universal things. And all art is an acting of the beauty that has been experienced, a perpetuation of it so that all men may share it for ever. The artist's effort is to be the sunset he has seen, to eternalize it in his art, but always so that he and all men may be part of this universal by their common experience of it.

So, as I say, the artist must not speak to any particular audience with the aim of pleasing them—there is that amount of truth in Whistler's doctrine; and he does fail if he does not communicate, since his aim is communication—there is that amount of truth in Tolstoy's doctrine.

But the next question that arises is the attitude of ourselves to the artist.

We have to remember that he is speaking not to us in particular, but to all mankind, and that he speaks, not to please us or to satisfy any particular demand of ours, but to communicate to us that universal he has experienced so that we with him may become part of it.

It follows then that we must not make any particular demands upon him. We must not come with our own ideas of what he ought to give us. If we do, we shall be an obstruction between him and that ideal universal audience to which he would address himself. We shall be tempting him, with our egotistical demands, to comply with them. But these demands we are always making; and that is why the relation between the artist and any actual public is usually nowadays wrong. I was once looking at Tintoret's 'Crucifixion' in the Scuola di San Rocco with a lady, and she said to me—'That isn't my idea of a horse.' 'No'—I answered—'it's Tintoret's. If it were your idea of a horse, why should you look at it? You look at a picture to get the artist's idea.' But that isn't the truth about art either. The artist doesn't try to substitute his own particular for yours. He tries to communicate to you that universal which he has experienced, because it is to him a universal, not his own, but all men's, and he wishes to realize it by sharing it with all men. His faith, though he may never have consciously expressed it to himself, is in this universal which, because it is a universal, can be communicated to all men. His effort is based on that faith. He speaks because he believes all men can hear, if they will.

So the effort of the audience must be to hear and not to distract him with their particular demands. They must not, for instance, demand that he shall remind them of

what they have found pleasant in actual life. They must not complain of him that he does not paint pretty women for them, or compose bright cheerful tunes. They are not to him particular persons to be tickled according to their particular tastes, but mankind to whom he wishes to communicate the universal he has experienced.

So, if there is an actual audience listening for that universal and clearing their minds of their own egotistical demands, then art will flourish and the artist will be encouraged to communicate that universal which he has experienced. But if particular audiences demand this or that and are not happy until they get it, if they say to him—Tickle my senses—Persuade me that all is for the best in the world as I like it ; that prosperous people like myself have a right to be prosperous ; that I am a fine fellow because I once fell in love ; that all who disagree with me are wicked and absurd—then you will have the kind of art you have now, in the theatre, in the picture gallery, in the cinema, in the novel ; yes, and in your buildings, your cups and saucers, your pots and pans even. For in the very arts of use you demand that the craftsman shall provide you with what you demand, and as cheap as possible ; because you do not understand that he should express himself, you do not understand also that his expression is worth having and that he ought to be paid for it. In the very pattern on a tea-cup, if it is worth having at all, there is the communication of that universal which the artist has experienced. It is there to remind you of itself whenever you drink tea, to bring the sacrament of the universal into everything as if it were music accompanying and heightening all our common actions ; but if you want a fashionable tea-cup cheap, you will get that, and you will not get anything expressed or communicated with it. You will be shut up in yourself and your own particularity and ugliness. If we want art we

must know how we should think and feel and act so as to encourage the artist to produce it.

But why should we want art at all? I hope I have answered that question incidentally. It is so that we may have life more abundantly; for we can have life more abundantly only when we are in communication with each other, mind flowing into mind, the universal expressing itself in and through all of us. We all more or less blindly desire this communication, but we seldom know why we desire it or even what exactly it is we desire. We make the strangest, clumsiest efforts to communicate with each other—I am making one now—and we are constantly inhibited by false shame from real communication. We are afraid to be serious with each other, afraid of beauty, of the universal, when we see it. On this point I will tell a little story from Mr. Kirk's *Study of Silent Minds*. At a concert behind the front, an audience of soldiers had listened to the ordinary items, a performance, as Mr. Kirk says, 'clean, bright, and amusing', which means of course silly and ugly. Then the orchestra played the introduction to the *Keys of Heaven*, and a gunner remarked—'Sounds like a bloody hymn.' That was his fear of beauty, his false shame. But when the *Keys of Heaven* was ended, the whole audience, including the gunner, gave a sigh of content; and after that they went to hear it time after time. Well, the beauty of that song, and of all art, is the 'Key of Heaven' itself. For Heaven is a state of being of which we all dream, however dully, in which all have the power of communication with each other; in which all are aware of the universal, possessed by it and a part of it, all members of one body, all notes in one tune, and therefore all the more intensely themselves, for a note is itself, finds itself, only in a tune; otherwise it is mere nonsense.

Of course if you are to believe this, you must believe in

the existence of a universal, independent of yourself, yet also in you and in all men. You must believe that beauty exists as a virtue, a quality, a relation of things, and that it is possible for you also to produce that virtue, to live in that relation. But no one can prove that to you. The only way to believe it is to see beauty with intensity and to make the effort of communication in some form or other.

Tolstoy believes that the very word beauty is a useless one because, he says, all efforts to define beauty are vain. But that is true of the word life, yet we have to use the word because life exists. And all explanations of art which refuse to believe in beauty as a reality independent of us, yet one of which we may become a part, do fall into incredible nonsense. We are told that art is play; the only answer to which is that it isn't. Others say that it is an expression of the sexual instinct, which has forgotten itself. They discover that in some savage tribe the male beats a tom-tom to attract the female; and they conclude that Beethoven's Choral Symphony is only a more elaborate tom-tom beaten to attract a more sophisticated female. But again the only answer is that it isn't; and that if all our ancestors were, not Whistler's dreamers apart, but beaters of tom-toms to attract females, then there was something in the sound of the tom-tom that made them forget the female. The reality of art is to be found not in its origins but in what it is trying to be; and what it is trying to be is always a communication between mind and mind; what we aim at in art is a fellowship not for purposes of use but for its own sake, the fellowship we feel when we are all together singing a great tune.

But now, since we have a hundred foolish ideas about art, its nature and value, it is of the greatest importance that we should attain to a right idea of it, not only as a matter of theory to be discussed, but as a religion to be practised. And, if we can grasp this right idea of it, we

shall not think of art as consisting merely of the fine arts, painting, poetry, music, sculpture. We shall see that it is possible for men to be artists, to exercise this great activity of communication, in the work by which they earn their living, and that a happy society is one in which all men do so exercise it. We are very far from that happiness now, and that is why Ruskin and Morris became almost desperate rebels against our present society. What they said about art and its nature is still the best that has been said about it, far nearer to philosophic truth than all that the professed philosophers have said, and of the utmost moment to us now. For if we could believe them we should change most of our values ; we should see that the ordinary man, now being deprived of all the joy of art in his work, is living a mutilated life ; we should place art among the rights of man. Whereas Rousseau said—All men are born free and everywhere they are in chains—we should say—All men are born artists and everywhere they are drudges. With our curious English originality, which hits on so many momentous truths and then makes no use of them, it is we who have found the greatest truth about art, but neither we nor any other people is at present making much use of it. Because we lack art, lack the power of communication, we lack fellowship ; and as Morris said—Fellowship is life and the lack of it is death.

For Reference

W. Morris, *Hopes and Fears for Art.*

# XI

## A GENERATION OF MUSIC

Dr. Ernest Walker

The general subject of this course is European Thought; and, to some, music may perhaps seem in this connexion rather like an intruder. Indeed, if the musician is, in William Morris's phrase, 'the idle singer of an empty day', if his business is to administer alternate stimulants and soporifics to the nerves or, at best, the surface emotions, or to serve in Cinderella-like fashion any passing, shallow needs of either the individual or the crowd, then, obviously, he has no place worth self-respecting mention in the world as it exists for philosophy. But widespread as some such conception of the function of music is, I hope you will agree with me in throwing it aside as, at any rate for our present purpose, no more worth the trouble of even approximately patient argument than that other less general but more objurgated conception of musical composition as something like a mechanically calculated spinning of bloodless formulae. By the conditions of its being, music has to express itself through non-intellectual channels, but may we not say that its essence is intellectual, that it is, in Combarieu's phrase, the art of thinking in sound—thinking in as precise a sense as the word can bear? It does not express itself verbally: it is self-dependent, with a language available only for the expression of its own ideas and not even indirectly translatable by nature into a verbal medium. Yet it is thought none the less; perhaps all the more. Words, we have often

been told, serve for the concealment of thought; but the language of music is more subtle, more comprehensive. It has been said that where words end, music begins; and anyhow, for musicians, there stands on record the serenely proud claim of one of themselves. 'Only art and knowledge', said Beethoven, 'raise man to the divine; and music is a higher revelation than all wisdom and all philosophy.'

But I must not allow this little preliminary apology to stray into the field of abstract aesthetics. The subject proposed to me, the correlation of the progress of specifically musical thought during the last generation with the progress of European thought in general, is so extensive that I cannot within the necessary limits attempt to deal with more than some of the most salient features, and even those I shall have to treat in very broad outlines, with a certain disregard of detail and nicely balancing qualifications. I shall only attempt to put before you what seem to me the most prominent considerations, and to throw out suggestions which I hope you may perhaps, if sufficiently interested, develop at leisure for yourselves.

In several ways the correlation of the musician with the non-musical world is now more intimate and conscious than ever before. Forty or fifty years ago—in spite of brilliant individual exceptions—musicians were, in the main, self-centred craftsmen; they were inclined to drift into a backwater, away from the chief currents of the intellectual, or often indeed of the general artistic life of their day, and they seem on the whole to have been content to have it so. In England we were somewhat behindhand, no doubt, in our participation in the gradual but steady change. But men like Parry and Stanford brought their profession into close touch with the general culture of their contemporaries, and made the

universities and music understand each other ; Grove, the first director of the Royal College, himself a man whose professional career (not to mention his amateur interests) had ended in music after ranging through civil engineering, business organization, biblical archaeology, and the editorship of a great literary magazine, preached with infectious enthusiasm the new doctrine of the larger outlook ; and for the last thirty years, even if our practice may have occasionally seemed somewhat to lag behind, at any rate our theory has not looked back. Musicians have been granted their claim to be judged by the same intellectual and moral standards as other reasonable people ; it is a modest claim, but, especially in England, it has had to be fought for.

And the entry on this wider heritage, which English musicians, apart from an exception or two such as Pierson and Bennett, won for the first time a generation ago, has had in every country a definite influence on composition, especially (as is only natural) on the composer's attitude towards the musical setting of literature. I should be far from saying that any modern is a greater song-writer than Schubert ; but it is obvious that the followers of Wolf and Duparc and Moussorgsky are aiming at something different. They may not express the general mood of the poem more faithfully, but they certainly attach more importance to its lyrical structure and to flexibly expressive diction : they accept the poet as an equal colleague. The serious song-writer can hardly any longer, like Schumann in his setting of Heine's 'Das ist ein Flöten und Geigen', afford to stultify great poetry by quoting from memory and getting the adjectives deplorably wrong. Nor can he, like Beethoven in 'Adelaide' and the 'Entfernte Geliebte' cycle, let himself weave musical structures many sizes too large for the proper structure of the

words, which have consequently to be repeated over and over again with very little regard for poetical or even common sense. Schumann and Beethoven, especially the former, were culturally very far from narrow-minded men ; but there was not in their days any general cultural pressure sufficiently strong to influence them as composers. Now, the pressure is so strong that few can resist. Most composers have now fully learned their lesson of a fitting politeness towards their poet-colleagues —learned it in the main, so far as not intuitively, from the high examples set by Wolf and the modern French school—and have, moreover, come to recognize the duty of setting such words as may be fit not only to be sung but to be read, a duty shockingly neglected by many of the greatest geniuses in musical history.

And the cultural pressure has gone farther than this. Not only has the increasing complexity of life broadened the musician's personal outlook, professional or unprofessional : it has also modified, whether for better or for worse, the outlook of the music itself. We may conveniently divide all music into two great classes : ' absolute ' music, in which the composer appeals to the listener through the direct medium of the pure sound and that alone ; and ' applied ' music, in which the appeal is more or less conditioned by words, either explicit or implicit by association, or by bodily movement of some kind, dramatic or not, or by any other non-musical factor that affects the nature of the composer's thought and the method of its presentation. Up to the present generation, instrumental music, unconnected with the stage, has been virtually identifiable with absolute music ; there are a handful of exceptions—sporadic pieces, usually though not invariably thrown off in composers' relatively easy-going moods, and an isolated figure or two of serious revolt, like Berlioz and Liszt—but they

only serve to prove the rule. Now, this identification is far from holding good. More consciously than ever before, instrumental music is straining beyond its own special domain and asking for external spurs to creative activity. And it asks in various quarters. It may ask merely the hint of particular emotional moods conditioned by special circumstances; or it may vie with the poet and the novelist in analysis of character. The psychology, again, may pass into the illustration of incident, whether partially realistic or purely imaginative, or into the illustration of philosophical tenets, as in Strauss's version of Nietzsche's doctrines in his *Also sprach Zarathustra* or Scriabin's of theosophy in his *Prometheus*. Or the composer may go directly to painting, whether actual as in Rachmaninoff's symphonic poem on Böcklin's picture of 'The island of the dead', or visionary as in Debussy's 'La cathédrale engloutie'. There is indeed no end to such instances.

All this development of instrumental music into territories more or less adjacent makes a very imposing show; and it is so markedly a product of the last generation that we easily over-estimate the novelty of its essential results. As I have said, instrumental music is more and more asking for external spurs to creative activity; but this does not mean that music as a whole is, so to speak, breaking loose from its moorings and adventurously voyaging on to uncharted seas. What it means is, simply, that, under the stress of modern culture, the barriers between vocal and instrumental, dramatic and non-dramatic, music have been to a great extent abolished.

We may consider music as normally involving three persons: the composer, the performer, and the listener. Until the present generation, the rôle of the listener was normally quite passive. All that he had to do was to keep his ears open to the music, and further, when

required, his ears open to words and his eyes to dramatic presentation. The composer and the performers did everything for him. But now they do not. The modern composer urges that, just as vocal music demands from the listener a separate knowledge of the words, so instrumental music may demand, as a condition of full understanding, a separate knowledge of some verbally expressible signification. The parallel no doubt holds well enough even if we answer, as we certainly may, that in much vocal music the words are so unimportant that it really does not musically matter if they are unintelligible or inaudible. But this latter-day demand on the listener is considerable. The listener to Strauss's *Don Quixote*, for example, must, in order to appreciate in full measure any section of this long work, have a fairly close acquaintance with Cervantes' book—whether derived from an analytical programme or from personal reading: there are neither words nor acting to give a clue, nor does the printed music itself give the slightest assistance, except in so far that a couple of themes are labelled with the names of the 'Knight of the sorrowful countenance' himself and Sancho Panza. Sometimes, no doubt, a composer helps at any rate the purchaser of his music more; but to the listener he gives nothing, and leaves his thought, as embodied in the mere title, to be reached as best it may. The modern composer makes these demands on the listener continually; and he does so simply because the sphere of the music-lover's imaginativeness and general culture has become so greatly enlarged that he thinks he can fairly afford to take the risk.

But we may well ask whether the music of suggestion has not, in its restless anxiety to correlate itself with non-musical culture, reached or perhaps even overstepped the limits of musical possibility. It is no question of a composer's rights: he has a right to do anything he

can, provided that he preserves a due proportion between essentials and unessentials. And judicious criticism will turn, if not a blind, at any rate a short-sighted eye towards a great composer's occasional realistic escapades, which, however irritating they may perhaps be to others, are to him only a part of the general background of his texture; after all, in their different media, Bach and most of the other giants have occasionally allowed themselves similar little flings. It is a question not of rights, but of powers. The poet and the painter and the novelist, not to mention all the non-human agents in the universe, are bound to do a good many things much better than the composer can; and even if he may personally aspire to be a kind of spectator of all time and existence, he has no means of making his listeners see eye to eye with himself. The risk he runs may be too great. Realizing as we must that all this ferment of suggestion-seeking has undoubtedly vivified and enriched musical development in not a few aspects, we may nevertheless feel, and feel profoundly, that there is a cardinal weakness inherent in it. A composer may so easily be tempted to forget that it is after all by his music, and by his music alone, that he stands or falls. If he asks too much extra-musical sympathy from the listener, he defeats his own end. The listener will inevitably concentrate on the unessentials, and will as likely as not get them quite wrong; he may indeed indulge the habit of realistic suspicion to such an extent as to make him become thoughtlessly unfair and credit the composer with sins of taste, whether babyish or pathological, of which the objurgated culprit may be altogether innocent. If a composer plays with fire, he is fairly sure to burn some one's fingers, even if he successfully avoids burning his own. And anyhow it is waste of time, and worse, for us to cudgel our brains to fits of

entirely unnecessary inventiveness when the composer has left his music unlabelled. We sometimes hear of children being encouraged to give verbal or dramatic expression of their own to instrumental music ; that is not education —very much the reverse. It is merely the expense of spirit in a waste of fancifulness, the wilful murder of all feeling for music as such.

The feeling for music as such, that is still the one thing needful. And by this canon, so it seems to me, we must judge all these alarums and excursions of modern composers. If we hold firmly by it, we shall not be unduly worried when we learn that the music which seems so perfectly to realize the composer's expressed meaning has been originally designed by him quite otherwise—as has happened oftener than is generally known ; though this fact does not excuse wilful contradictions of a composer's definite intentions, as in the vulgar perversion of Rimsky-Korsakoff's *Scheherezade* popularized by the latest fashionable toy, the Russian Ballet, which would do more musically unexceptionable service were it to confine itself to works specially designed for it, such as the fascinating and finely-wrought scores of Stravinsky, or concert works like Balakireff's *Thamar*, based on programmes that can be mimetically reproduced without unfaithfulness. And anyhow, in the midst of all these appeals to the eye or the literary memory or what not, we may call to mind the simple truth that music is something to be heard with either the inward or the outward ear, and if we are too much distracted otherwise, our hearing sense suffers. We shall pay too high a price for our latter-day correlation of music with literature and the other arts if the music itself has to play the part of Cinderella. 'We do it wrong, being so majestical.'

Again, we may endeavour to correlate recent musical

development with the development of the conceptions of nationality and race. With nationality in the strictly political sense music has, indeed, nothing to do: there is no inborn musical expression common to all the inhabitants of Switzerland, or the United States, or the British Empire (or indeed the British Islands). And if we abandon political nationality entirely and think of national music solely in terms of race, we still have to make very large deductions. Heredity counts, it would seem, for far less than environment in musical development—especially so in these days of free intercourse. Nevertheless, we may to some extent isolate the racial element; and within the last generation increasingly vigorous efforts have been made to do so—though they have perhaps neglected sufficiently to observe that racial ancestry is often an extremely mixed quantity.

To the musician, this insistence on race is in the main a quite modern thing. It is true that, as the successive waves of Italian influence flowed northward in the sixteenth, seventeenth, and eighteenth centuries, they met in England, France, and Germany, and, at the end, in Russia, native cross-currents; and there was plenty of controversy between the opposing parties. But this controversy was mainly concerned with matters of technique; whereas the whole force of the modern movement consists in its reliance on the simple folk-music which is supposed to be characteristic of the race as a whole, and about which hardly any composers of the past consciously troubled themselves at all. Haydn and Beethoven, no doubt, used folk-tunes in their own works to some extent, but the former's adaptations from the uncultivated tunes of his own Croatian people are polished nearly out of recognition, and when the latter commandeers from Ireland or Russia or elsewhere, nothing but pure Beethovenishness remains after his

masterful hand has done its will. We may say, indeed, that nationality, as such, was never in their time a conscious factor in musical composition.

The modern movement seems to owe its origin to several non-musical causes. For example, the spread of political democracy had no little influence in arousing interest in the music specifically characteristic of at any rate the non-urban sections of the newly enfranchised classes. But, in the main, it was caused by the modern rise into something like political prominence of the smaller nations, smaller either in size or in historical importance. The events of 1848, for example, brought Hungarian folk-music before the world; Bohemian claims against Austria produced the work of Smetana and Dvořák, largely based on the general style of their own native melodies; the Irish Question made us know the Irish songs; and the dominating races followed those leads, at any rate in so far as to take interest in their own traditional music, and try to evaluate its differentiating factors. Conscious connexion between artistic composition and folk-music has varied very much: very strong in Russia and other Slavonic countries, it has been very weak in Italy and France; in Germany we find all stages between the work of Brahms, where the folk-element is very notable, and of Wolf, where it is non-existent; in our own islands it has been very weak, but is now becoming very strong. But, whether this connexion has been conscious or not, still, sooner or later, all the insisters on the importance of the element of nationality have joined hands with the enthusiasts for the folk-music of the people. In the work of preserving the knowledge of this folk-music England has been one of the last of all countries: even the last edition of Grove's *Dictionary*, our standard authority, gives many pages to Scotland and Ireland and Wales, and

smuggles English folk-music into an appendix. Only indeed in the twentieth century has anything like an adequate study of the varied treasures of English folk-music become possible, and we have learned enough to realize that great folk-music is no monopoly of the races that have been either politically or socially decentralized.

This advance of the conception of racialism has widened and intensified music in not a few ways. It has brought to our knowledge many splendid melodies, infinitely varied in design and emotional range, and, at their best, inspirations that the greatest composers would have been proud to sign. And, mixed as are the feelings with which we must contemplate the general course of our own musical history, we can anyhow boast of some of the finest folk-tunes in existence in these relics of the old world on its last western fringes, in Ireland and the Hebrides. We have come to see that this great mass of traditional music—only in part, of course, the outpouring of sheer genius, but at its worst sincere—is, with its appeal alike to the child and the adult, either in years or in musical culture, the most perfect educational weapon yet devised with which to combat all the forces that make for musical degradation. And, apart from all this half-unconsciously wrought music, we have been shown the value of the bypaths in art, of the work of the great men of the younger races like the Scandinavians and the Czechs and most of all the Russians, who do not speak the older classical tongues but have, all the same, abundance to say that is well worth the whole world's hearing. It is to our immense gain that we have now come, far more than ever before, to realize that in the house of music there are many mansions. And, once again, we have been taught the duty of being fair to the men of our own blood, past and present. Particularly in our own artistic history there has been visible a strongly

marked tendency, such as no other nation has shown in equal measure, to neglect and depreciate native work in comparison with foreign, even when the latter might perhaps be worse. But I think we may say, without self-laudation, that British composition is now worth some considerable attention from ourselves and others: it was, not unnaturally, wellnigh forgotten during its sleep from the death of Purcell till the rise of Parry—a fairly sound sleep, during which it occasionally half-opened its eyes for a moment or two—but it is wide awake now. We are still slow to learn the lesson; but we have come to realize, at any rate theoretically, the duty of doing what we can, in the spirit not of favouritism but of justice and knowledge, to disprove the proverb that a prophet (and an artist also) has no honour in his own country and in his father's house.

So much to the good. But to-day, more than ever before, many voices are urging us to go farther—and, I think, to fare worse. Artistic racialism has always been spontaneous, so far as the art is great. No composer who is worth anything can be dragooned into being patriotic: he will go his own way. Some are attracted more than others by the general types of phrase or the general emotional moods exemplified in the folk-music of their own race; but that is a matter for neither credit nor discredit. Individuality includes race as the greater includes the less. The only vital consideration is the value of the output in the general terms of all races; and indeed all great folk-music, like any other kind, speaks, for those who have ears to hear, a world-language and not a dialect. And there is still more at stake in this issue. Those who, as I do, hold that the best chance for the political future of the world lies in the weakening of national and racial as well as class consciousness, must needs regard very suspiciously any of these modern

attempts to force music into channels which are deliberately designed for it by non-musical considerations: the fettering, by set purpose, of art is a very considerable step towards the fettering of life itself. England may sometimes have failed in kindness to her own artistic children, living and dead; but at any rate we have been free from the curse of a narrow jealousy and have steadfastly held to the proud faith of the open door and the open mind. The ideal—so violently dinned into our ears nowadays—of a national school of composers may very easily mean a wilful narrowing of our artistic heritage. If an English composer with nothing to say for himself imitates Brahms or Debussy, it is obviously regrettable; but he will not mend matters by imitating Purcell. And, after all, the musician who (save occasionally when seeking texts for his own individual discourses) borrows his material from his native folk-music stamps himself, just as much as if he borrowed from any other quarter, as a common plagiarist incapable of inventing material of his own. If we may adapt for the purpose Johnson's famous aphorism about patriotism and scoundrels, we may say that racial parochialism is the last refuge of composers who cannot compose. Let us assert once more the supreme beauty of folk-music at its best; but it is often childish, and, anyhow, childish or not, it is after all the work of children. And any of the world's activities would come to a strange pass if children—or any races or classes which, through lost opportunities or the oppression of others, are still virtually children—were to dictate principles of intolerance to those who, by no merit of their own but as a plain matter of fact, can possess the wider vision. Let a composer steep himself as much as he can in his native folk-music, as in all other great music, and then write in sincerity whatever is in his own marrow; but anything

approximately like a chauvinistic attitude towards music, as towards any other of the things of the spirit, means either insensibility to spiritual ideals or unfaithfulness to them. Let me take an analogy. I have always felt that a philosophical and historical study of the idea of honour would throw more light than anything else on many great problems, notably the problem of war, and that in this investigation the conception of the duel would have a very prominent place. May we not say that, just as the individual honour of each of us, unless we are members of the self-styled upper classes of a few countries, is now supposed to be able to take care of itself, so the blood in a composer's veins will, if his music is worth anything, be able to take care of itself also? Neither honour nor artistic personality is affectable by external considerations which are on a different plane of value. And music indeed is the most specifically international, or supernational, of all the arts; it has not, like literature, any barriers of language, nor, like painting or sculpture or architecture, any local habitation. Musical separatism is not a natural quality; it needs careful and continuous fostering. And I know from personal experience that, all through the war, there was no difficulty at all in carrying on concerts in the programmes of which works by living German composers, and songs in the German language, were included in their due proportions just as before.

Another great factor in modern European thought with which I would attempt to correlate music is the factor of religion. No one will deny that the last generation has seen profoundly important changes in religious thought: whatever may have been the eddies and backwaters, the main stream has run, and still runs, like a cataract. These changes may be very differently judged by different types of men, all of them equally

firm believers in the supremacy of spiritual ideals: some may definitely regret, some may, with the help of such conceptions as that of progressive revelation, steer a middle course, some (among whom I would number myself) may definitely welcome. But in whatever light we may regard these radical refusals of the old allegiances, we shall naturally expect to find their influence in music, which has had in many ways so intimate a connexion with religion. Indeed, the conception of music as in some special way the handmaid of religion dies very hard. It is still possible, in April 1919, for distinguished musicians, when appealing for funds for the foundation of a professorship of ecclesiastical music, to put their names to the statement that 'the church will always be the chief home and school of music for the people'[1]: and this when the facts about attendances at places of worship have long been familiar. We must rate the influence of church music more modestly; it has a great influence in its own sphere, but its sphere is only one among many.

We may, I think, envisage this religious development on its practical side as a process of differentiation by which the sincere standers in the old and the middle and the new paths have little by little drawn apart intellectually—but not, in societies that are happily able to take broad views of human nature, otherwise than intellectually—not only from each other but still more from those who, whatever their ostensible labels, are in reality followers of Gallio and routine. And something like the same process is observable in the religious music of the past generation. Many of its old conventions have silently dropped away, unregarded and unregretted: whatever the outlooks, and they are many and various, they are more clear-sighted, more sincere.

[1] *The Times*, April 17, 1919.

Here in England we have somewhat lagged behind: we have had, not perhaps altogether fairly but indubitably, a reputation for national hypocrisy to sustain, and our religious music has only with difficulty shaken itself loose. Not very long ago, Saint-Saëns's *Samson and Delilah*, now one of the most popular of operas, could only be performed as an oratorio: it dealt with biblical incidents and characters, therefore it was religious music, therefore it could not be given stage presentation. Of course this kind of attitude is never logical: for a long time we closed Covent Garden to Strauss's *Salome* for the same reason, but no one, so far as I know, ever proposed to endow it with a religious halo. Now, when Sunday secular music is everywhere, its origins seem lost in antiquity; but the chamber-music concerts at South Place in London and Balliol College in Oxford, which are, I think I am right in saying, the twin pioneers, are both little over thirty years old. In most other countries, however, music has suffered far fewer checks of this kind; and it is of more importance to correlate musical and religious development on more general lines. Particularly interesting, I think, is the history of the decline of the oratorio, which I should myself be inclined to date from the production of the German Requiem of Brahms about half a century ago, though the real impetus has become apparent only during the last generation.

Brahms's Requiem was indeed something of a portent: it was a definite herald of revolt. The mere title, 'A German Requiem', involving the commandeering of the name hitherto associated exclusively with the ritual of the Roman Church and the practice of prayers for the dead, and its adaptation to entirely different words, was in itself of the utmost significance; and the significance was enhanced by the character of the words themselves.

In the first place, they were self-selected on purely personal lines; in the second place, they were, theologically, hardly so much as Unitarian. Brahms claimed the right to express his own individual view of the problem, and at a length which involved the corollary that the problem was regarded in its completeness. The 'German Requiem' cannot be considered, as an anthem might be, as an expression of a mere portion of a complete conception of the particular religious problem: in an organic work of this length, what it does not assert it implicitly denies or at any rate disregards. And this was at once recognized, both by Brahms's opponents and by himself: he categorically refused to add any dogmatically Christian element to his scheme. Similarly with his *Ernste Gesänge*, written some thirty years later, at the end of his life: he balances the reflections on death, taken from Ecclesiastes and similar sources with the Pauline chapter on faith, hope, and charity—not with any more definite consolation. And again, with the choral works, the settings of Hölderlin's *Schicksalslied*, Schiller's *Nänie*, Goethe's *Gesang der Parzen* (the first-fruits of the essentially modern spirit which has impelled so many composers to choral settings of great poetry)—they deal with the ultimate things, but the expression is never, so to speak, orthodox: it is imaginative, sometimes perhaps ironical, but never anything but intensely non-ecclesiastical.

Brahms's Requiem represents, as I have said, the beginning of the change in the conception of concert-room religious music, of the abandonment of the old type of oratorio in favour of something much more conscious and individual; and in refusing to take things for granted, religious music has been altogether in line with general religious development. The change can perhaps be observed in English music more markedly

than elsewhere. Oratorio, in the sense in which we ordinarily use the term, is to all intents and purposes an invention of the genius of Handel reacting on his English environment: the form was of course older, but he gave it a specific shape that set the fashion for future times. It had its birth in a business speculation; it was a novelty designed to occupy the Lenten season when the theatres were not available for opera. Like the opera, it supplied narrative and incident and characterization though without scenery or action, and it dealt with biblical history. The history of the oratorio is the history of this loose compromise; it has afforded an attractive flavour of the theatre even to those to whom drama may in itself have seemed disreputable, and it has had the advantage of possessing subjects which combined unquestioningly accepted literal truth with unlimited possibilities for wholesale edification, and at the same time made no intimately personal claims. The libretto of Mendelssohn's *Elijah* is perhaps at once the most familiar and the most skilfully compiled example of the type; but it is now, so far as great music is concerned, extinct. Here in England—where, for something like a century and a half, the demand was so large that composers, when tired of writing oratorios themselves, still went on producing them out of the mangled fragments of other music—Parry's *Judith* of 1888 is the last of the old type from the pen of a great composer; and his subsequent works show, in striking fashion, the direction of the newer paths. There is no longer the assumption that everything in the Bible or the Apocrypha is at one and the same time literally true and somehow or other edifying. *Job* and *King Saul* are great literature and vivid drama; they stand on their own merits. And the long succession of smaller choral works, in which Parry mingled in curious but

intensely personal fusion his own earnest but somewhat pedestrian poetry with fragments of the Old Testament prophets, represent a still further abandonment of the old routine; they form a connected exposition of his philosophy of life, on the whole theistic rather than specifically Christian, and always transparently individual. Individual—that is the real issue. According to their differing temperaments, different composers may swing towards either the right or the left wing of thought in these non-ecclesiastical expressions of ultimate things: Stanford may join with Whitman or Robert Bridges, Vaughan-Williams with Whitman or George Herbert, Frank Bridge with Thomas à Kempis, Walford Davies with a mediaeval morality-play, Gustav Holst with the Rig-Veda, Bantock with Omar Khayyam. But the essentials, for any composer worth the name, are that his theme shall have its birth in personal vision and shall appeal to personal intelligence. The routine oratorio fulfilled neither of these conditions; and it is dead beyond recall. It was a curious illustration of foreign ignorance of British musical life that Saint-Saëns, when asked to write a choral work for the Gloucester Festival of 1913, should have imagined that he was meeting our national tastes with an oratorio on the most prehistoric lines. However, the unanimous chilliness with which *The Promised Land* was received must have effectually disillusioned him.

But the liberalisers, though the more numerous force, have no monopoly of sincerity: among the genuine conservatives also we can find, I think, signs of the correlation of musical with religious development. We have had, during the last generation, many works that are in the legitimate line of descent from the great classical settings of ritual words or (as with the Passions and Cantatas of Bach) words that are intended anyhow to

appeal not as literature but as dogma. When Elgar prints on the title-pages of his oratorios the letters A.M.D.G.—*ad majorem Dei gloriam*—the personal note is, in these days, obvious. His own libretti to *The Apostles* and its sequel *The Kingdom* (and to the further sequels which had been sketched out twelve years ago, though none has as yet seen the light) resemble those of the older type of oratorio in so far as they include narrative and dramatic incident and religious moralizing; but there is not a trace of the old lethargic taking things for granted, it is all a ringing sacramental challenge to the individual soul. Elgar's work is indeed the typical musical expression of recent Roman Catholic developments; but there are others also. There was Perosi, the Benedictine priest, whose oratorios, tentative, childishly sincere mixtures of Palestrina and Wagner, were forced upon Europe in the late 'nineties with the full driving power of his Church, and who, when his musical insufficiency became palpable, was dropped in favour of Elgar himself, whose sudden rise into deserved fame coincides in time. There was again the allocution of Pius X, known as the *Motu proprio*, which sought to reform ecclesiastical music and has, however fruitless it may have been elsewhere, made the services in Westminster Cathedral, under Dr. Terry's direction, a Mecca for musicians of all faiths who are interested in the great sixteenth-century masterpieces. There are also the aristocratically Catholic composers of latter-day France, centring round Vincent d'Indy and the *Schola Cantorum* and looking back for inspiration to César Franck. And again, in the English communion, there is the marked High-Church movement for the encouragement of dignified music, a movement that has had great influence in the purification of popular taste. And the pivot round which all this turns is the dogmatic faith that definitely

Christian expression in music is the property, the exclusive property, of those who by temperament and conviction are Christians. The attitude, like the conditions which have brought it about, is, I think, new: but some of its adherents go surely too far when they urge that those whose minds work otherwise cannot really appreciate this music at its due worth. César Franck, that simple-minded childlike genius, once pronounced Kant's *Kritik der reinen Vernunft* 'very amusing'—a surely unique criticism—simply, it would seem, because it was eccentric enough not to take Catholicism as a primary postulate: I do not myself happen to have any information about Kant's musicianship—perhaps, like too many great thinkers, he knew little about music and cared less—but I think we may venture to say, in the abstract, that his philosophy would have made him fairer to Franck than Franck was to him.

And thus perhaps we may conclude that recent musical development has kept pace with religious development in concentrating more and more on individual sincerity, whether on the one side or the other, and abandoning the old easy-going haphazard routine. But, in reaction from the extreme right and the extreme left of the movement, we have also the sincere dislikers of stark thinking, whom their opponents call by dignified names of abuse, such as pragmatists or undenominationalists: and here again music keeps pace with religion. It is not the old routine again (though perhaps in practice it may at times come rather perilously near it); it is the more or less conscious adoption of a compromise. We can see its musical working best of all in the recent history of church music in England; it is true that the great mass of the younger musicians, here as in all other countries, stand outside these developments,* and look both for ideals and practice elsewhere, but the developments

have none the less been very significant. There have been three stages. A couple of generations ago there was no conflict and no call for compromise. The ecclesiastical musician of the time was expected, whether as composer, as organist, or as administrator, to do his best according to his lights: it was his accepted business, as presumably knowing more about the matter than the artistic laity, to lead their taste, not to follow. Then came the reign of men like Dykes and Stainer and Gounod, whose normal attitude involved the sacrifice by the musician of some of his musicianship in the supposed interests of religion. The supposed interests, I say; for the whole point of the third stage of development, the conflict in which English church music is now involved, is the denial by one of the opposing parties that the interests of religion are in any way served by such a sacrifice. It is a very keen conflict, in which the sympathies of the musician *qua* musician naturally lean towards those who uphold the inalienable dignity of his art: and even if he feels that ecclesiastical music, *qua* ecclesiastical, is outside his personal concern, influences from it are bound to radiate into the secular departments. But what I would more especially point out is that the religious and the musical developments proceed side by side. Just as the stricter purists in the one field are, in the other, generally inclined, even if themselves unmusical, to uphold plain-song and the Elizabethans and only such modern work as is inspired by something like a similar spirit, aloof and strong, so those whose religious mentality is of a more pliable type are, if musically indifferent, generally inclined to uphold the practical accommodation afforded by the inclusion of at any rate a certain quantity of music that is consciously adapted to the more immediately obvious emotions of the average worshipper.

And, even if there is no question of a lowered artistic

standard, we see, I think, the same spirit of compromise, of ready acceptance of the more immediately obvious as the average and proper norm for all people, elsewhere on the boundaries of musical and religious life. It is so easy to turn a blind eye to logic and minorities, or even to majorities if they have little pressure, social or other, to back them up. To illustrate from one or two English examples, the transformations of cathedrals into secular concert-rooms are as open to blame from the one side as are, from the other, such assumptions as that of the 'Union of Graduates in Music' to take rank as a definitely ecclesiastical, indeed an Anglican society. Again, it so happens that a somewhat exceptional proportion of English musicians hold, or have held, as conditions of livelihood, posts to which not all of them would have aspired had other channels, open to their foreign fellow-artists, been open to them also; and, as a necessary consequence, there is more probability here than elsewhere of the musical profession presenting practical problems for the intellectual conscience to solve. So far as the musician is a personal non-conformer and also a teacher (even if not a church organist), he is often compelled into a tacit agreement with the Cowper-Temple clause, at the least: and so far as he is a convinced conformer, he is often compelled to strain, far beyond the meaning of the parable, the principle of letting the wheat and the tares grow together. This is called a practical age: and the compromisers, in religion and in religious music, are a powerful force. But I would venture to think that the future lies, in the long run, in other hands than theirs.

To the mediaeval musician, religion and science were the twin foundations of his art. But while the influence of religious development can without difficulty be traced in musical history, the influence of scientific development

is much more contestable. It may indeed, I think, be said that post-mediaeval music has gone its own way without considering science at all. Theorists of course there have been, and still are, who try to discover scientific foundations for the art of music as we moderns know it: they do their best to correlate mathematical physics with practical composition. But during the past generation these attempts, never very hopeful, have become much less so. It is only too easy to play scientific havoc with the foundations of modern music: but, arbitrary and scientifically indefensible though they may be, they are our inheritance. Music has come to be what it is by methods that will not bear accurate investigation: our tonal systems are mere makeshifts, and no composer can completely express his thoughts in our clumsy notation. I doubt if, throughout all this last generation that has seen such overwhelming scientific advance, music has really been scientifically affected (in the strict sense of the word) in the slightest degree, if we exclude some interesting experiments in sympathetic resonances, primary and secondary, at which some recent composers for the piano have, at present rather tentatively, tried their hands. And whole-tone and duodecuple scales and modern harmony in general are taking us farther and farther away from those natural laws of the vibrating string upon which arm-chair theorists have sought to build a very top-heavy edifice. Of course, the vibrating string ultimately gives—mostly out of tune—all the notes of the chromatic scale, but composers employ them on principles the reverse of mathematical.

The growth of music has not been scientific; but growth of some kind is evident enough, though it is none too easy to define it at all adequately. Some might say, with Romain Rolland in his *Musiciens d'autrefois*, that 'the efforts of the centuries have not advanced us a step nearer

beauty since the days of St. Gregory and Palestrina'; but this is surely a narrow outlook. Beauty combines the many with the one: and plain-song and the *Missa Papae Marcelli* show us only a few, a very few, of its manifestations. But artistic progress is, anyhow, very subtle and evasive; and musical progress, in particular, is hardly correlatable with any other. Above all, we must recollect that, to us Europeans, music—which, in the only sense worth our present consideration, is an exclusively European product—is incalculably the youngest of the great arts; if we exclude some monophonic conceptions that have still their value for us, it is barely five hundred years old at the most.

During the last generation an advance in material complexity is obvious, even though the complexity may often enough be one of accidentals rather than essentials. An orchestral score of Wagner is relatively simple in comparison with one of Delius or Ravel or Scriabin or Stravinsky or Schönberg; and the demands on performers' technique and also on their intelligence have steadily increased to heights altogether unknown before. The composer has at his present disposal a vastly enlarged medium; the possibilities of sound have developed incalculably more than those of paint or stone or marble. Pheidias could, we may imagine, have appreciated Rodin across a gulf of over two thousand years; but it is difficult to see the points of contact, after little over three hundred years, between Palestrina and any twentieth-century work that would claim to be 'in the movement'. And it is not only in complexity that we have advanced. We have extended the limits of musical style. We have adopted in sober earnest methods forecasted at rare intervals in the past by adventurous explorers, and employ musical notes not as elements in any harmonic scheme but purely as points of colour,

exactly as if the definite notes were mere clangs of indefinite instruments like cymbals or triangles. Wordless vocal tone, moreover, of several different types, is pressed into the same service. Varied tonal and harmonic colour, and structural freedom: those are the two battle-cries of the young generation. Little by little the old tonalities, based as they were on fixed centres, are slipping away; all the notes of the chromatic scale are acquiring even status; the principles of structure are newborn with every new work. And advance of this kind has been extraordinarily accelerated during the last twenty years. At no time in musical history have there been such express-speed modifications of manner as those which divide, let us say, the latest piano pieces of Brahms (1893) and the latest of Scriabin (1914). It is possible, indeed, that our standard system of keyboard tuning may require modification in the not very distant future. Once again, as three hundred years ago, music seems to be in the throes of a new birth. On the former occasion, the process of convalescence lasted rather more than a century, from Monteverde through Carissimi and Schütz and Purcell to Bach; and it may perhaps take as long now.

But it is plain enough that mere novelty does not involve progress; if it were so, the music of the casually strumming baby would demand high recognition. Nor is progress to be found in merely quantitative, Brobdingnagian expansion. And when we have taken our stand on what seems a sufficiently sound definition of musical progress in its material aspect—the combination of novelty with expansion, the new thought with its appropriately enlarged medium—we have yet to remember that many very fine composers still can, and do, express their natural and full selves in older idioms, and that progress of this kind, however widespread it may become,

is not necessarily advance in the scale of values. There is, somewhere or other, a limit to the cubic capacity of things: they cannot increase indefinitely in depth and breadth at once. We may confidently hope that we have not yet musically come within hailing distance of the limit: but nevertheless it is becoming more and more difficult to see music steadily and see it whole, and it is useful to take stock of our position. Our musical minds are very much broader than they were: in that sense we can well, like the heroes of Homer, boast that we are much better than our fathers. But are they also deeper? We have gained access to many new rooms in the house of art, rooms full of strange and beautiful things, for the knowledge of which we must needs be profoundly and lastingly grateful; but some of the rooms seem rather small and their windows do not seem to have been opened very often, while others seem liable to be swept by hurricanes which upset the furniture right and left. Veterans there are, musicians not to be named except with high honour, who fall back for nutriment on the great classics and pessimism; but our notions of beauty cannot stand still, and in all ages of music one of the most vital tasks of criticism has been to distinguish between the relatively non-beautiful which has character and truth and its superficial imitation which has neither. All musicians very well recollect their first bewilderment at what has afterwards become as clear as daylight. But we must retain our standards of judgement. We have no right to criticize without familiarity, but we must remember that over-familiarity, mere dulled habitual acceptance, means equal incapacity for criticism. If, after trying our utmost, we still cannot see any sense in some of these modernist pages, there is no reason why we should not say so; it is quite possible that there really is no sense in them, and that the composer is

perfectly aware of the fact. Odd stories float about the artistic world. And if the anarchists call us philistines and the philistines call us anarchists, it is fairly likely that we are seeing things pretty much as they are.

Moreover, it is worth remembering that a good deal of what is loosely called modernism is in reality very much the reverse. There is nothing progressive in the confusion of processes with principles, in the breathless disregard of the larger issues. Take the ideal of 'direct expression of emotion', the attempt to give, as Pater said half a century ago, 'the highest quality to our moments as they pass and simply for those moments' sake'. Musically, it is a return to the childhood of our race, to the natural savage. If a musical composition is to consist of anything more than one isolated noise, it must inevitably have a form of some kind, its component parts must look backward and forward. The latter-day composers who speak of Form as a kind of bogey that they have at last exorcized remind us of those latter-day thinkers who boast that they have abolished metaphysics. We cannot leap off our shadows; if we try, we shall only find that we are left with a residuum of bad metaphysics or bad musical form—as thoroughly bad as the metaphysics and the musical form that have resulted from the confusion of the one with empty word-spinning and of the other with hide-bound pedantry. Again, much of the modern rhythmical complexity strongly resembles, in essence, the machine-made experiments of mediaeval times; and the peculiarly fashionable trick of shifting identical chords up and down the scale—the clothes'-peg conception of harmony, so to speak—is a mere throw-back still farther, to Hucbald and the diaphony of a thousand years ago. And the insistence, now so common, on the decorative side of music, the conscious preference of the sensuous to the intellectual

or emotional elements, brings us back to our own infancy, with its unreflecting delight in things that sparkle prettily or are soft to the touch or sweet to the taste. It is a reaction from sentimentality, no doubt, but is a reaction to an equal extreme, a perversion of the truth that great art never wholly gives itself away. As Vincent d'Indy has justly pointed out, the 'sensualist formula'—'all for and by harmony'—is as much an aberration of good sense as the parallel formula of the ultra-melodic schools of Rossini and Donizetti: in either case it means the sacrifice of spaciousness to immediate effect, the supremacy of sensation over the equilibrium of the heart and the intelligence. Not of course that any music lacks the sensuous element; but it is a matter of proportion. And very distinguished as are many of the modern exponents of this side of things, history tells us, I think, that they are working in a blind alley. They have their supporters, no doubt. M. Jean-Aubry, in his very suggestive and valuable book on modern French musicians, has used a phrase that seems to me worth remembering; he speaks of the 'obsession of intellectual chastity' which, to his mind, disfigures the work of César Franck and other great composers whom he therefore rejects from his latter-day Pantheon. I am glad to think that Franck would have gloried in this shame. He, and a very goodly company with him, knew that music was, at its highest, something better than an entertainment, however thrilling or however refined.

But, whatever critics and composers may feel about musical progress, it is, as Wagner said, in the home of the amateur that music is really kept alive, and the amateur's music depends very largely on the schools. A generation ago music was certainly sociologically selfish. Musicians had not realized that all classes of the community were open to the influences of fine music, if only they had the

opportunities for knowing it. But since then there have been very great advances, both quantitative and qualitative, in musical education. We have spread it broadcast, in the increasing faith that appreciation depends, not on technical knowledge or executive skill, but on the responsive temperament and the will to understand. Familiarity, familiarity at home if possible, is the key to this understanding; and in this connexion there is, I believe, an enormous educational future before pianolas and gramophones, if only the preparation of their records can be taken in hand on artistic rather than narrowly commercial lines. And our standards of judgement have risen: we do not worship quite so blindly mere names, whether of the past or of the present, nor exalt the performer quite so dizzily above what is performed. Nor do we quite so glibly disguise our indifference to vital distinctions by talking about differences of taste: we know that, however catholic we may rightly be within the limits of the good, whether grave or gay, there comes sooner or later, in our judgement of musical as of all other spiritual values, a point where we must put our foot down. We are going on, and our theories are sound enough: but the path of a democratically widened, and rightly so widened, art is by no means easy. The principle of levelling up slides so readily into the practice of levelling down: and the book of music is closed once for all if we are to accept the plenary inspiration of majorities.

But here in England the greatest danger to musical progress is, I venture to think, the self-styled practical Englishman—fortified as he is by the consciousness that, for at any rate a couple of centuries or more, we have as a nation taken a low view of the arts and have been rather proud of it than otherwise. It is so obvious that no profession is economically more unsound than that of the serious composer: it is not so obvious that we

owe all the great things of the spirit by which we chiefly live to those whom the world calls dreamers, among whom the great musicians have had, and, I hope and believe, will always have, no mean place. Against the 'practical Englishman', and all that his attitude to music involves, we can all of us fight in our respective spheres: and I would commend to you for useful weapons three very different books by very different men—Sir Hubert Parry's great book on *Style in Musical Art*, Mr. C. T. Smith's account of his artistic work in an elementary school in the East End of London which he calls *The Music of Life*, and a pamphlet *Starved Arts mean Low Pleasures* recently written by Mr. Bernard Shaw for the British Music Society. And one particular line of indirect attack, easily open to all of us, is, I am inclined to think, specially promising. In the third and fourth verses of the thirty-fifth chapter of the book of Ecclesiasticus we shall find these injunctions, which I translate as literally as Greek epigrams can be translated: 'Do not hinder music: do not pour out chatter during any artistic performance: and do not argue unseasonably.' In other words, conversation, however valuable, prevents complete listening to music; and music that is not meant to be listened to in its completeness is not worth calling music, and had much better not be there at all. Musical progress will be spiritually well on its way when we all realize this axiomatic truth as firmly as this Hebrew sage of two thousand years and more ago.

# XII

# THE MODERN RENASCENCE

F. Melian Stawell

To understand in any degree the modern outlook on life it seems necessary to go back to the time of the French Revolution. For at that stirring epoch there flamed up in the minds of enthusiasts an ideal of man's life larger than had ever yet been known, and one that has dominated us all ever since. If we give, as I think we should give, a wide sense to the word 'Liberty' and make it mean all that stands for self-development, then one may say that this ideal was fairly well summed-up in the famous Revolutionary watchword, 'Liberty, Equality, Fraternity'. It is impossible at any rate to read the idealists of that time and its sequel—say from 1793 to 1848—whether in France, Germany, England, or Italy, whether inside or outside the Revolutionary ranks, without feeling their buoyant hope that a fresh era was opening in which man, casting aside old shackles and prejudices, could advance at once towards knowledge, joy, splendour, both for himself and all his fellows. Shelley, perhaps, is most typical of what I mean. Hogg laughed at him for his belief in the 'perfectibility' of the race, but Hogg knew the belief was vital to the poet. To Shelley it was a damnable doctrine that the many should ever be sacrificed to the few: yet neither was the ultimate vision that inspired him the vision of the few being sacrificed for the many. He was anything but an ascetic seeking martyrdom. The martyrdom of his Prometheus

is a prelude to the Unbinding when happiness shall flood the world:—

> 'The joy, the triumph, the delight, the madness!
> The boundless, overflowing, bursting gladness,
> The vaporous exultation not to be confined!'

And not only happiness and love, but knowledge also: the Earth calls to the Sky: 'Heaven, hast thou secrets? Man unveils me; I have none.' Soberer spirits shared this poet's ecstasy. Wordsworth sang

> 'Bliss was it in that dawn to be alive,
> But to be young was very heaven.'

And that heaven was exactly this foretaste of the Spirit of Man entering undisturbed into his full inheritance at last: Science welcomed as a dear and honoured guest, Poetry known as 'the breath and finer spirit that is in the countenance of all knowledge'.

It is scarcely necessary even to mention the high hopes of the French themselves, the confident anticipation of an Age of Reason when all men should be brothers and the earth bring forth all her treasures, but it is well worth noting the attitude of Goethe, an attitude the more significant because, in a sense, Goethe always stood outside the French Revolution. But he, like the best of its votaries—and this is less known than it should be—desired the development of all men every whit as much as he desired the high culture of a few. It was for the double goal that he worked. 'Only through all men,' he writes in a notable passage, 'only through all men, can mankind be made.'[1] All good lies in Man, he tells us again, and must be developed, 'only not in one man, but in many'. Goethe, the so-called aristocrat, has given us here as true a formula for the democratic faith as could well be found. And to him, as to Shelley and to Words-

[1] *Wilhelm Meister's Lehrjahre*, Bk. 8, c. 5.

worth, Poetry and Science were not enemies but friends dearer than sisters. Those three, Shelley, Wordsworth, and Goethe, foreshadowed a new poetry of science that has never yet been achieved, though fine work has been done by Tennyson, Whitman, Sully Prudhomme, and Meredith.

Goethe, moreover, again like Shelley and the French, broke with all ideals of mere self-abnegation. In his poem, 'General Confession', he makes his disciples repent of ever having missed an opportunity for enjoyment and resolve never so to offend again. Here, as often, Goethe comes into the closest touch with our modern feeling. We, too, can never return to the Franciscan ideal of poverty, celibacy, and obedience as the highest life for man on earth. We have done with self-denial except as the means to a human end. We are still in the tide of what I would call the Modern Renascence; we claim the whole garden of the world for our own, the tree with the knowledge of good and evil included, reacting even from Christian ideals if they can make no room for that. But, after all, the characteristic of the belief dominant a century ago was exactly that such room could be made, that Hellenism could be combined with Christianity, and self-development with self-denial.

And this belief is, I think, reflected in the music of the time. Schubert, that sweetest soul of tears and laughter, understands every shade of wistfulness, and yet again and again in his music it seems as though the universe had become, to quote a lover of his, one immense and glorious blackbird. Mozart, in 'The Magic Flute', as Goethe seems to have recognized, sings the very song of union between the unreflecting joy of the natural man and the strenuous self-devotion of the awakened spirit. Beethoven, greatest of them all, plumbs the lowest depths of suffering and then astounds and comforts us by ineffable

vistas of happiness. After years of personal misery he crowns the glorious series of his symphonies by the one that ends in a hymn of joy, freedom, and faith, embracing the whole world—'Diese Kuss der ganzen Welt'—that majestic open melody, clear as the morning, fresh as though it came from far oversea, greater even than any of the great harmonies that have gone before, larger than the tortured human heart, steadier than the sudden ecstasy of the spirits set free, stronger than the swan-song of the dying, a melody content with earth because it is conscious of heaven. I offer no apology for weaving my own fairy-tales round such music: I see no harm in the practice, but only good, so long as we understand what we are about. Music, it is true, is something other than, in a sense more than, either thought or feeling or even poetry, and cannot be reduced to any of them (nor any of them to it). The universe would be poor indeed if it could be so. But none the less the truth may be, as Spinoza thought, that the universe is at once a unity and a unity with many facets, so that any one facet, while for ever unique, can bring to our minds all the mysteries of the rest.

In any case, the high confidence that breathes in the music of a hundred years ago meets us again in the philosophers.

Hegel, born in the same year as Beethoven and Wordsworth (1770), is sure that nothing can resist the onslaught of man's spirit. 'Stronger than the gates of Hell are the gates of Thought.' Fichte is convinced that there waits in man, only to be developed, a power that will unite him with all other men and at the same time develop his own personality to the full. In a sense, the deepest, each man *is* his fellow-men, and they are he.

How much this conception has affected modern thought can be seen in a recent and very remarkable book, *The*

*New State*,[1] where the very basis of democracy is shown to be the faith in this essential unity, a unity to be worked out, not yet realized, but capable of realization, a faith stirring all through the modern world, in ways expected and unexpected, from Syndicalism to the League of Nations.

Later than Hegel and Fichte, the great Positivist conception of life preached by Comte is instinct with this belief that man united with his fellows, and only as so united, can attain heights undreamt-of and unlimited.

The flood-tide of this faith flowed far into the nineteenth century. The Italian Mazzini, leader of revolt in 1848, was filled with it. Prophet of the most generous political gospel ever preached, he lived on the hope that, if freedom were given to the nations and duty set before them, they would prove worthy of their double mission, and peace would come to pass between all peoples.

But even Mazzini had his moments of agonizing doubt. And others beside him, men of lesser intellect as well as greater, were soon to raise, or had already raised, voices, stern or fretful, of protest and criticism. It became clear at last that this joyous confidence rested on a very definite view of life and one that might easily be challenged, the view, namely, that at bottom the universe meant well to man, that his greatest aspirations were compatible with each other and nowise beyond attainment. Almost from the first there were men of the modern world who did challenge this. Byron and Schopenhauer are significant figures, both born in the same year, only eighteen years later than the great Three of 1770, Wordsworth, Hegel, and Beethoven. Byron is full of moody questionings, Schopenhauer of much more than questionings. Against the dauntless optimism of Hegel, he flatly denies that the universe is good, or happiness possible for man. On the

[1] By M. P. Follett (Longmans).

contrary, at the heart of it and of him there lies an infinite unrest, never to be quieted until man himself gives up the Will to Live and sinks back into the Unconscious from which he came.

Now after Schopenhauer came Nietzsche, and though Nietzsche's influence may have been exaggerated, yet undeniably it has been of immense importance both for Germany and Europe. He is typical of the change that begins to appear about the middle of the century. Reacting from the optimism of the idealists (which seemed to him both smug and false), Nietzsche welcomed Schopenhauer's more Spartan view with a kind of fierce delight. But his criticism of Schopenhauer was fierce too, and he gave a strangely different turn to such parts of the doctrine as he did accept. To Schopenhauer, since it was folly to hope for real happiness in this life or any other, the wise course would be to kill outright, so far as possible, the Will to Live itself. To Nietzsche the wise course was to assert life, to claim it more and more abundantly, to face this tragic show with a courage so high that it could be gay, a courage that could do without happiness, and yet that turned aside from none of life's joys simply because they were fleeting, that was more than content to ' live dangerously ', picking flowers, as it were, clear-eyed, on the edge of the precipice. And this not merely in the temper of ' Let us eat and drink, for to-morrow we die.' For him the motto would have run, ' Let us be up and doing, for to-morrow we die ', sustained by the belief that the heroic struggle now would lead inevitably to the production of a nobler type of man, a man who would be something more than man—the Super-man, to give him the name that every reader knows, if he knows nothing else about Nietzsche.

Even this short statement shows how Nietzsche shared the admiration for life and power characteristic of what

I have called the Modern Renascence, and how deeply he was influenced by the doctrine of Evolution, and that in a not unhopeful form, the hope for an advance in the race at least, if not in the individuals now living. And it shows too how mistaken those are who see in him nothing but a preacher of brutal egotism. If he had been only that, he would never have won the influence he possessed and possesses. Yet there is important truth in the cursory popular judgement. If his teaching has its heroic side, a side that has enabled him to give succour to many when other and sweeter gospels are spurned as flattering unctions, he has also a most ruthless element. And this partly because of his very sincerity. Accept the doctrine that men and women perish like candles blown out in the night, accept it really and fully, with intellect, imagination, and feeling, and then see how much light-heartedness can be got out of life, if we still allow ourselves to pity men. Nietzsche had intellect, imagination, and feeling, and he saw plainly enough that, while even in such a universe there could be a grim happiness for the lives of heroes, there could be nothing but infinite sadness for the countless failures who have never been either happy or heroic. There was no immortality; these wretched beings would never have another chance. If joy was to be kept (and Nietzsche was avid for joy), if the universe was to be accepted (and Nietzsche desired above all to say Yes! to the universe), then he must root out pity from his heart as an unmanly weakness. In this way was sharpened the ruthlessness and savage arrogance latent in the man, a ruthlessness and an arrogance that have done so much harm both to his country and the world.

In fairness, we must add that Nietzsche could not succeed in his own attempt; the struggle tore him to pieces and he died in madness.

But it is above all instructive to contrast him here with several of his contemporaries and successors. Browning in England, Walt Whitman in America, facing the same problems of joy and struggle, of life and death, of the few great and the many commonplace, of Man himself and the Nature that seems at once his mother and his enemy, refused to give up the hope of a solution, nay, they were sure they had found a solution, and for them it was bound up with the hope of immortality. They go even beyond the earlier men in their insistence on the double ideal of Paganism and Christianity, but they have an insistence of their own on the belief in unending life as alone giving man elbow-room, so to speak, for working out his destiny. Browning claims eternity as the due of every man, however mean; and if Whitman feels his foothold 'tenon'd and mortised in granite', it is because he can 'laugh at dissolution' and knows 'the amplitude of time'.

But in such insistence and such conviction they have not been followed, speaking broadly, by our leading writers since. On the other hand, they have been so followed, again speaking broadly, in their loyalty to the twofold ideal. Here and there, no doubt, as I have said, writers like Nietzsche, on the one hand, have tried to be satisfied with the splendid development of a Few, or, on the other hand, like Tolstoy, have flung back in a kind of despair to the old ideal of abnegation, of sheer brotherly love and nothing else, turning their backs on all splendours of art, knowledge, or delight, that do not directly minister to the one thing they hold needful. But the earlier and wider ideal, the ideal of our Renascence, once envisaged by man, that has not been lost, and I believe never can be lost. Its own greatness will keep the foremost men true to it. Meredith is one of the men I mean. He is full of pity, but he does not only pity men and women—he wants them to grow, and to grow for themselves. His

whole attitude towards Woman shows this: for the women's movement is nothing more and nothing less, as Ibsen also felt, than one big stream of the general movement towards liberty and self-determination. So far Meredith marches with Browning and Whitman. But he will never commit himself about immortality. It seems enough for him to take part in the struggle for a finer life, at once heroic and tender, not caring overmuch whether we reach it or no. 'Spirit raves not for a goal' is one of his hard and characteristic sayings, and here he seems to me typical both of modern thought in general and especially of English thought, and that both for good and ill. We see in him the want of precision, the lack of logical coherence, that have prevented us from ever producing a philosopher of the first rank. At the same time there is something true and profound in his instinct that the moment has not yet come in which to formulate our faith. We all feel that we are on the brink of tremendous, perhaps terrifying, discoveries; we resent any cut-and-dried solution, however pleasant, perhaps all the more if it is pleasant, and we resent it because we feel that at bottom our hopes would be travestied by any conception we, with our little intellect and minute knowledge, could at present frame. It was once said to me by a far-seeing friend [1] that the modern dislike of church-going, the modern incapacity to write a long coherent poem, the modern passion for music and for realism, even for sordid realism, all sprang from the same roots, from the thirst for an infinite harmony, the belief that everything was somehow involved in that harmony, and the conviction that all systems, as yet made or makeable, were entirely inadequate.

[1] Professor A. C. Bradley, to whom also is due the passage about Schubert and the parallel drawn between Beethoven, Hegel, and Wordsworth.

And to the list we may add, I think, the modern passion for history and for science. We study history not merely to be warned by failures or inspired by shining examples: at bottom we have a belief that somehow the lives and struggles of those men in the distant past are still quite as important as our own. We follow the discoveries of science not only for their commercial value or because we share the excitement of the chase, but because, deeper than all, we suspect that the universe is a glorious thing.

And there is another matter, perhaps the most important of all, on which I would dwell as I draw to a close, where Meredith leads directly to the dominant thought of the present day. I mean his feeling that, if the universe is to be proved acceptable to man's conscience, it will be through the effort of man himself struggling towards his own ideal. It is as though the world itself had to be redeemed by man. This hope is the real hope of our time. So far as the modern world believes the doctrine of the Incarnation, it is in this sense that it believes.

And this belief we find everywhere in all hopeful writers, great or small. It gives dignity to the latest writings of H. G. Wells, this faith in a spirit moving in man greater than man himself, worthy to fight and fit to overcome all that is wrong in the universe. Bernard Shaw's creed is just the same, sometimes thinly disguised under respect for 'the Life-Force', sometimes coming boldly forward in audacious, profound assertions that God needs Man to accomplish His own will and is helpless without him. 'There is something I want to do,' Shaw imagines his God as saying, 'and I don't know what it is; I must make a brain, the human brain, to find it out.' Rodin modelled a mighty hand, the Hand of God, holding within it Man and Woman. Shaw, it is reported, asked the sculptor: 'I suppose you meant your own hand after all?' 'Yes,' said Rodin, 'as the tool.'

The same idea is at the base of what is most stimulating in Bergson, the idea of what he calls Creative Evolution, an undefined splendour not yet fully existing, but, as it were, crying out to be born, and only to be born through the struggle of man's spirit with matter. This is one function of matter, perhaps the supreme function, to be the material through which alone man's vague ideal can become definite and actual, just as an artist can only get close to his own conception through the effort to embody it in visible form or audible sound.

From this point of view, the world is conceived as anything but ready-made, rather it is in the process of making, and we ourselves are among the makers. Or, to take a metaphor that perhaps appeals more to the modern world, it is a fight, and an unfinished fight. To quote William James, 'It *feels* like a real fight—as if there were something really wild in the universe which we, with all our idealities and faithfulnesses, are needed to redeem; and first of all to redeem our own hearts from atheisms and fears.' He goes on to confess that he himself does not know, and certainly cannot prove scientifically, that the redemption will surely be accomplished. Such proof, he admits, 'may not be clear before the day of judgement (or some stage of being which that expression may serve to symbolize)'. 'But the faithful fighters of this hour, or the beings that then and there will represent them, may turn to the faint-hearted, who here decline to go on, with words like those with which Henry IV greeted the tardy Crillon after a great battle had been gained:

"Hang yourself, brave Crillon! We fought at Arques, and you were not there!"'[1]

[1] From *The Will to Believe*, quoted in Bridges' *The Spirit of Man*, No. 425.

Thus, if the idea of the splendour and perfection of the universe has sunk into the background, if the sense of worship and the feeling of ecstasy have been dimmed (and I think they have), at least the reverence for heroism and for tenderness has not been impaired, and there after all lies the root of human majesty. There is deep pathos in the change, but maybe, paradoxical as it sounds, deep hope as well. The world may grow the stronger for having to live now by what Carlyle called 'desperate hope' as distinct from 'hoping hope'. The triumphant harmony that seemed attained a century ago by certain poets and thinkers may have been, after all, too cheap and easy, if not for their own large spirits, at least for us, their lesser readers. Mystics have spoken of 'The Dark Night of the Soul' as the stage inevitable before the crowning glory, and to-day some of those who call to us out of great darkness are among our greatest leaders.

Of such certainly is a living writer, now beginning to be acclaimed as he deserves, the writer Conrad. In some ways this noble novelist might stand as the special representative of modern feeling. A Pole by birth and more than half an Englishman by sympathy, his view of life is as wide as it is profound and grave. It has all the sternness of temper of which I have spoken, the determination to look facts in the face whatever the consequences. Conrad would echo Sartor's noble cry for Truth—'Truth! though the Heavens crush me for following her;—no Falsehood! though a whole celestial Lubberland were the price of Apostasy!' This determination is fierce enough to be taken for cynicism, but Conrad is far too tender ever to be a cynic. So also does his pitifulness prevent him from ever falling into the errors of a Nietzsche, but none the less he has all Nietzsche's ardour for heroism. That to him is the core of life:—'to face it.' 'Keep on facing it,' so the old

skipper tells the young mate in *Typhoon*. And facing the mysterious universe, peering into the Darkness with steady alert eyes, Conrad has at once an endless wistfulness and, or so it seems to me, a secret unquenchable hope. Doubt certainly he has in plenty. The sea of which he is always dreaming is terrible and cruel in his eyes as well as august and ennobling.

But he is sure of one thing : it is through the struggle with it and such as it that man alone can become Man. It is through facing the horrors of a dead calm, with a sick crew on board and no medicine, that the young master of the sailing-vessel in the Pacific crosses successfully the Shadow Line that divides youth from manhood. And it is through facing the unleashed fury of the tornado that the old captain of the 'full-powered steam-ship' in *Typhoon* shows what he has in him, compassion and kindness as well as shrewd knowledge of men, expert seamanship, and indomitable heroism. The whole thing is driven home with a power, an incisiveness, and a delicate irradiating humour which I should despair of conveying by mere criticism. The book must be read for itself, and read again and again. It is told, in one way, simply as a sailor's yarn, but it awakes in us the feeling that the struggle is a symbol of man's life.

Threatened by the advancing cyclone, Captain MacWhirr, 'the stupid man' of no imagination, decides, almost instinctively, that the only thing to be done is to keep up steam and face the wind. By sheer force of personality he holds the crew together and carries the ship through. And in the desperate struggle, every nerve on the strain for hours that seem unending, MacWhirr finds time to care for the miserable pack of terrified coolies on board, who have given way to panic and are fighting madly in the hold. MacWhirr stops this, brings about order and a chance for the Chinese, when the rest of his men, fine men as

most of them are, can think of nothing but the safety of the ship. ' Had to do what 's fair for all,' he mumbles stolidly to his clever grumbling mate, Jukes, during a dead lull in the storm—' they are only Chinamen. Give them the same chance with ourselves ' . . . ' Couldn't let that go on in my ship, if I knew she hadn't five minutes to live. Couldn't bear it, Mr. Jukes.' He does not know whether the ship will be lost or not—(and we do not know whether mankind will be lost or not)—what he does know is how he must act. But also he never loses hope. ' She may come out of it yet ' : that is the kind of answer the taciturn man gives when driven to speech. The chief mate, locked in his captain's arms to brace himself against the hurricane, scarcely able to make the other hear in the terrific gale though he shouts close to his head, gets back such answers, and with them the power to endure. He tells him the boats are gone : the captain yells back sensibly, ' Can't be helped.'

And so noble is the power with which Conrad uses our tongue, the tongue he has made his own by adoption and genius, that I must let him speak for himself, and can find no better close for my own lame words. Jukes has been shouting to his captain again :

' And again he heard that voice, forced and ringing feebly, but with a penetrating effect of quietness in the enormous discord of noises, as if sent out from some remote spot of peace beyond the black wastes of the gale : again he heard a man's voice—the frail and indomitable sound that can be made to carry an infinity of thought, resolution, and purpose, that shall be pronouncing confident words on the last day, when heavens fall and justice is done—again he heard it, and it was crying to him, as if from very, very far—" All right." '

Date Due

Book new generalization = an aspect of divinity.

Illumination of last revelation" - (Bellamy) 163

Well-rounded" man 264

Dogmatism with the particular 273

Refusing to take things for granted 278

Seek the kingdom first. 285

Preference of the censurious 289

Key to understanding music 291

Standards of judgment have risen 291

Danger of practical man 291

Ruth 101

The obsequies of materialism 103

Influence of France 92.

A note is also only in a tune 259

The preference of the censurious, 289

Modern Logic most potent weapon against 34

Moral & esthetic education 39

To those whom the world calls dreamers 292

Real nature of phenomena beyond observ
289 What might to be 46, 61 109
Pragmatism a open forces 62 128

CB
417
.M35

1046

824.91 M391r
Marvin, Francis Sydney,
Recent developments in
European thought; essays
arranged and ed.

Please Observe

Date Due

814
MA.1

MAIN CB417.M35
Marvin, Fran Recent developments in Eur
3 9536 000 125 797

C0-CWK-667